DOCUMENT RESUME

ED 431 944 CE 078 976

TITLE	Informal Workplace Learning.
PUB DATE	1999-03-00
NOTE	33p.; In: Academy of Human Resource Development (AHRD) Conference Proceedings; see CE 078 963.
PUB TYPE	Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE	EDRS Price MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	Adult Education; *Creativity; Cross Cultural Training; Design; Educational Needs; Educational Practices; Employed Women; Experiential Learning; Feminism; Foreign Countries; *Human Resources; *Informal Education; *Labor Force Development; Models; *On the Job Training; Outcomes of Education; Skill Development; Small Businesses; Teaching Methods; Training Methods; Transfer of Training; *Work Attitudes
IDENTIFIERS	*Feminist Scholarship; Romania; Thailand

ABSTRACT

The first of the four papers in this symposium, "Re-conceptualizing Marsick and Watkins' Model of Informal and Incidental Learning in the Workplace" (Maria Cseh, Karen E. Watkins, Victoria J. Marsick) describes the use of a revised model to encompass the learning perspectives of small business owner-managers who work in the volatile political and economic environment of the transition to a free market economy in Romania, a group that has not been represented in previous research based on these models. "Creativity and Design" (Sharon J. Korth, Brenda S. Gardner) examines the creative processes and attributes of 10 HRD (human resource development) practitioners, using both qualitative and quantitative methods. Results include a comparison of creativity styles and preferences using the Myers-Briggs Type Indicator and the Kirton Adaption Innovation Inventory as well as a model derived from the data which describes the creative design process used by the subjects. "Contradictory Practices: Critical Feminist Perspectives on HRD and Workplace Learning" (Sharon L. Howell, Vicki K. Carter, Fred M. Schied) addresses HRD practice through the perspective of critical feminist scholarship, including an analysis of feminist sociology of work, ethnographies of women in the workplace, feminist pedagogical theory and practice, and critical adult education, finding that the underlying concepts of HRD are inherently antifeminist and possibly antidemocratic. "Self and Team Development in Practice (STP) Walk Rally" (Chiraprapha Tan Akaraborworn, Gary N. McLean) reports on an evaluation study conducted to assess strengths and weaknesses of an outdoor-based experiential training program used in Thailand. The study found that most of the principles in adult theory, experiential learning theory, and Holton's HRD Evaluation Research and Measurement Model are met by the STP Walk Rally, but that it cannot promise transfer of learning. (KC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 431 944

12 **Informal Workplace Learning**

Chair: Margaret Lohman, University of Iowa

12 - 1 Re-conceptualizing Marsick and Watkins' Model of Informal and Incidental Learning in the Workplace

Maria Cseh, Oakland University

Karen E. Watkins, University of Georgia

Victoria J. Marsick, Columbia University

12 - 2 Creativity and Design

Sharon J. Korth, Xavier University

Brenda S. Gardner, Xavier University

12 - 3 Contradictory Practices: Critical Feminist Perspectives on HRD and Workplace Learning

Sharon L. Howell, Pennsylvania State University

Vicki K. Carter, Pennsylvania State University

Fred M. Schied , Pennsylvania State University

12 - 4 Self and Team Development in Practice (STP) Walk Rally

Chiraprapha Tan Akaraborworn, University of Minnesota

Gary N. McLean, University of Minnesota

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

MCseh SHowell
SKorth GMcLean

2A

BEST COPY AVAILABLE

CE 078 976

Re-conceptualizing Marsick and Watkins' Model of Informal and Incidental Learning in the Workplace

Maria Cseh
Oakland University

Karen E. Watkins
The University of Georgia

Victoria J. Marsick
Teachers College, Columbia University

This paper presents an empirically grounded re-conceptualization of Marsick and Watkins' (1990, 1997) models of informal and incidental learning in the workplace. The re-conceptualized model encompasses the learning perspectives of small business owner-managers who work in the volatile political and economic environment of the transition to a free market economy in Romania, a group that has not been represented in previous research based on these models.

Keywords: Informal and Incidental Learning, Theoretical Model Building

The seeds of informal and incidental learning concepts were planted long before scholars and practitioners began to use these terms. In the 1920s and 1930s, Lindemann (1926) and Dewey's (1938) vision of learning emphasized the role of reflective thought in education and the importance of learning from experience and lifelong learning. Although Knowles (1950) introduced the term informal learning in his pioneer work entitled *Informal Adult Education*, only in the last two decades did researchers embark on defining and studying this type of learning (Bell, 1977; Mocker & Spear, 1982; Marsick & Watkins, 1990, 1997; Watkins & Marsick, 1992; Center for Workforce Development & Education Development Center, 1998; Garrick, 1998; Lohman & Woolf, 1998). A search of Dissertation Abstracts International alone revealed 143 dissertations between 1980 and 1998 that discussed issues surrounding informal learning. The studies cover a wide variety of settings such as health care (La Paro, 1991; Larson, 1991; Menard, 1993; Murray, 1993; Carter, 1995; Rossi, 1995); education (Selke-Kern, 1986; Mealman, 1991; Dowrick, 1992; Ahmad, 1994; Mott, 1994; Lewis, 1995); and business (Carrigan, 1989; Dechant, 1989; Howe, 1991; Macmahon, 1992; Volpe, 1992; Diaz-Alemany, 1993; Morton, 1993; Stevens, 1993; Bierema, 1994; Shapiro, 1994; Ellinger, 1997; Cseh, 1998). These studies attest to the importance and prevalence of informal and incidental learning in the workplace.

About a decade ago, Marsick and Watkins (1990), based on their research and inquiry into the learning process, set out to describe and define informal and incidental learning. Their journey in the realm of informal and incidental learning is still continuing while more than twenty of their students have used their models (1990, 1997) to explore the informal and/or incidental learning of different professionals or groups of people. The need to re-conceptualize Marsick and Watkins' (1990, 1997) models came from the theoretical implications of Cseh's (1998) study of the learning of owner-managers of small, successful Romanian companies working in a volatile environment so different from the relatively stable context of studies conducted in the United States and Western Europe. This study was not designed to empirically test these models, but to elaborate on the triggers, learning strategies, and lessons learned. Although this study added thick description to these three components of the models, the question of what is not captured in the models seemed worthwhile to explore and an empirically grounded re-conceptualization of the models into a model that incorporates that learning was a result of our exploration. In the following sections we define informal and incidental learning, present Marsick and Watkins' (1990, 1997) models, Cseh's (1998) contributions, and our re-conceptualized model.

Defining Informal and Incidental Learning

As the concepts of informal and incidental learning, natural learning, experiential learning, everyday learning, intentional learning, nonformal learning, self-directed learning, self-planned learning are used interchangeably in the literature and they are in contrast with formal learning; we consider it important to define these concepts. Formal

Copyright © 1999 Maria Cseh, Karen E. Watkins, & Victoria J. Marsick

learning is typically formally structured, institutionally sponsored, classroom-based learning where an educational agent -- educator or trainer -- is responsible for planning, implementing and evaluating the learning that takes place (Brookfield, 1983; Marsick & Watkins, 1990; Merriam & Caffarella, 1991; Watkins & Marsick, 1992).

We define *self-learning* as the learning initiated by the learner that can happen either in formal or informal settings. In contrast with formal learning, *informal and incidental learning* refers to the learning that results from the natural opportunities for learning that occur everyday in a person's working life when the person controls his/her learning. Some types of informal and incidental learning include self-directed learning, social learning, mentoring, coaching, networking, learning from mistakes, trial-and-error. According to Marsick & Watkins (1990, 1997), Watkins & Marsick (1992) informal learning can be planned or unplanned and involves some degree of conscious awareness that learning is taking place. Incidental learning, "a subcategory of informal learning, is defined by Watkins as a byproduct of some other activity, such as task accomplishment, interpersonal interaction, sensing the organization, trial-and-error experimentation, or even formal learning" (Marsick & Watkins, 1990, p.12). Incidental learning is unintentional/unexpected and almost always takes place although people are not always conscious of it. When it remains unexamined, it may lead to reinforcement of misconceptions and prejudices, thus to learning of error or no learning at all, becoming 'miseducative' (Jarvis, 1987). This type of learning is tacit, taken-for-granted, and implicit in assumptions and actions. Examples of incidental learning are learning from mistakes, assumptions, beliefs, attributions, internalized meaning constructions about the actions of others, and in hidden curriculum in formal learning. This learning is of particular interest since it so often is recognized through post hoc reflection. As a result, the role of the learning facilitator is wholly transformed.

Marsick and Watkins' (1990, 1997) Models of Informal and Incidental Learning

Marsick and Watkins (1990, 1997), Watkins and Marsick (1992) developed a theoretical framework and a model for understanding informal and incidental learning in the workplace. As they described, "we based our model on the action science model of Argyris and Schön (1978) that, in turn has roots in John Dewey's (1938) theories of learning from experience and in Kurt Lewin's understanding of the interaction of individuals and their environment" (Marsick & Watkins, 1997, pp. 295-296). This model was developed and refined over the years. In their book *Informal and incidental learning in the workplace*, Marsick and Watkins (1990) present an incidental problem-solving model (Figure 1).

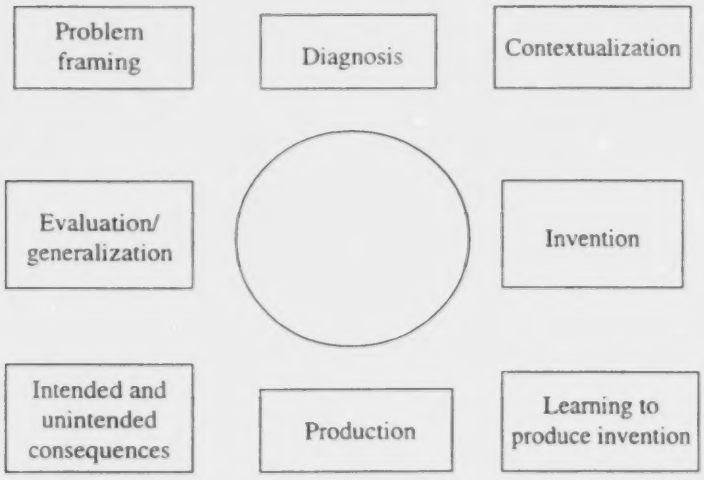

Figure 1. Incidental learning as part of problem-solving model From: Marsick, V. J., & Watkins, K. E. (1990). Informal and incidental learning in the workplace. London, England: Routledge. Reprinted by permission.

In this model, when learning takes place from experience, under non-routine conditions, people frame the situation they encounter (Diagnosis) by using their judgement based on their previous experiences and knowledge (Problem Framing). In order to develop a strategy to deal with the situation, they view solutions through the lens of the context, assessing the constraints and limitations of that context against the feasibility of each solution (Contextualization). Thus, in this model the context is used to test possible solutions. Once a strategy or invention is formulated (Invention), people may need to learn how to produce that strategy (Learning to Produce Invention). The implementation of the strategy (Production) leads to consequences which may be the intended ones or sometimes unintended ones (Intended and Unintended Consequences). People then embed into their consciousness assumptions or generalizations about whether or not the strategy worked. Thus, out of the consequences, meaning is made of the experience and what is learned from the experience is retained (Evaluation/ Generalization).

Marsick and Watkins note that individuals may make errors at any point in this cycle and errors made in an earlier stage almost guarantee errors in later stages. They contend that "Because this problem-solving so often occurs as an automatic process and because so much of the process is tacit or unexamined, the potential for error is great" (p. 225). In order to avoid some of these errors, thus to be more effective in solving problems, the authors underline the need for surfacing this learning. Marsick and Watkins' research showed that critical reflection enabled people to challenge norms and examine the assumptions behind their reasoning and actions. They noticed that "People learned best when they were able to ask questions about why they saw the world as they did, whether their thinking was true, or how they came to believe a perceived truth that they held sacred" (p. 220). They also noticed that this process was mostly enabled through the assistance of facilitators, mentors, colleagues, family, or friends whose feedback opened the learners up to other points of view.

Marsick and Watkins (1990) also developed a model of informal learning that is essentially a problem solving model: formulate a problem, design and implement a solution, and assess results. Formulating a problem is preceded by intelligence activity; designing a solution is preceded by design activity and followed by choice activity; and implementing a solution is followed by experimenting activity. These stages were merged in the 1997 model. In 1997, Marsick and Watkins present a revised model of informal and incidental learning (Figure 2).

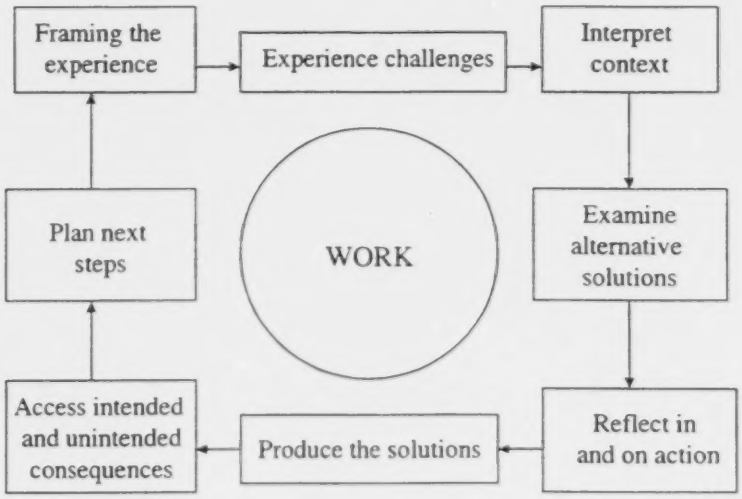

Figure 2. Informal and incidental learning model
From: Marsick, V. J., & Watkins, K. E. (1997). Lessons from informal and incidental learning. In J. Burgoyne & M. Reynolds (Eds.), Management learning: Integrating perspectives in theory and practice (pp. 295-311). London: SAGE Publications. Reprinted by permission.

Based on insights gained from action science and theories of learning from experience, Marsick and Watkins reinforce the idea that problem solving is not linear and thus, their model is neither linear nor prescriptive. As they describe it, "steps such as observation and reflection are interwoven throughout various phases of the model, and the learning process varies because of the situation in which people find themselves. The problem-solving cycle is

embedded within a sub-surface cycle comprising the beliefs, values and assumptions that guide action at each stage" (p. 297). Marsick and Watkins remind again that because informal and incidental learning is seldom consciously and critically examined, it is subject to a high degree of misinterpretation. Thus, they emphasize the need to identify and acknowledge the tacit beliefs, values, assumptions, contextual factors and unintended outcomes.

A Re-conceptualized Model of Informal and Incidental Learning

The need to address the re-conceptualization of Marsick and Watkins' (1990, 1997) models came from the findings of Cseh's (1998) study. This study emerged from the researcher's interest in helping managers in Central and Eastern Europe cope with the unprecedented changes they were facing. As Child and Czegledy (1996) noted, "Since 1989 the area has been experiencing economic and political reforms of immense proportions. It has become a 'living laboratory' in organizational transformation within a context of profound institutional change" (p.167). The purpose of Cseh's (1998) study was to examine the critical learning experiences which enabled owner-managers of small private companies in Romania to lead successfully in the transition to a free market economy, in order to determine what triggered their learning, what strategies they used, and what lessons they learned. In-depth, face-to-face interviews using the critical incident technique were conducted with 18 managers. Fifteen managers, between 28 and 62 years of age and representing both genders and the nationalities (Hungarian and Romanian) specific to the two Romanian regions selected, were included in this study. Seventy two critical incidents were generated. Content analysis was used to initially code the data in three major categories: Triggers, Learning Strategies, and Lessons Learned. These categories were predetermined based on Marsick & Watkins' theoretical framework. During this process, a new category clearly emerged. This category, "Framing the Business Context," was defined as the constraints and opportunities perceived by the managers in the context in which they operated. A total of 511 data strips were categorized in this way. The third step in analyzing the data was the open coding of the data inside each of the categories to obtain specific themes. For an elaboration of Cseh's specific findings, see Cseh (1999) in these proceedings.

All of the managers participating in this study gave detailed accounts of their perception of the economic, political and social context in which they worked and their learning experiences were all embedded in this context. The fact that 111 data strips represented by sentences or phrases emerged from the data as related to the managers' business context strengthens the argument that learning is embedded in the context of the learner and that triggers for learning are selected based on this framing of the business context.

Based on this study, it is clear that the context permeates every phase of the learning process - from how the learner will understand the situation, to what is learned, what solutions are available and how the existing resources will be used in the learning process. The following examples of critical incidents illustrate the influence of this turbulent context on the learning of the owner-managers.

The changing legal system and its lack of clear rules and ever changing regulations was mentioned by several managers as triggers of their critical incidents and thus of their learning. Although the manager of a company manufacturing leather clothes was assured by authorities that he could take apprentices and certify them, when the time for certification arrived, it turned out that he had no right to certify. He recounted how "until this day the law didn't come out, so private companies can't train, actually they can train but not certify apprentices." This put the manager in a very difficult situation as he promised the parents of his apprentices that in two years they will be certified. And he kept his promise by talking to the director of a Co-op school which had the right to certify. With his help, he organized classes, brought together professionals to teach these classes, and talked to the parents to decide how to divide the instructional fees. All of this involved a tremendous effort, but he managed to solve the situation and learned a lot in the process.

Similarly, government red tape often thwarted these entrepreneurs efforts. No help and support from the government and the problems in dealing with state-owned companies were mentioned by the managers on twenty five (25) occasions as hindrances in their work. When talking about the incident when his company's license was revoked, one owner-manager described how

> The Romanian Transportation Ministry didn't help us at all. To the contrary, they told us to go and solve our problems elsewhere, and that they don't want to get involved in anything. So far, the ministry - and I suppose the government as well, although I didn't work with it directly - didn't support our activities. They don't want to get involved in problem solving, but these small companies which are just forming these days need their help and they should act like a hen for the chicks. Especially since these small and medium size companies, being so many, contribute to the

> country's economy a considerable amount of money in comparison to the big mammoths [state-owned companies] which have enormous losses.

As the re-authorization of the company's license had to be approved both by the Romanian and Hungarian transportation ministers, this unwillingness to help on the part of the Romanian ministry caused the transportation sectors executive director a whole month of commuting between Bucharest and Budapest while he tried to learn how to solve this problem. Although it was never found out who the drivers were who caused this incident, the license was re-authorized after suitcases of files with all of the driving records, stamped with the hours and dates of departures/arrivals, proved the good standing of the company. While telling his story, the manager also remembered how in general:

> It's hard to solve any problem in government institutions. The public office worker here is like [he] always was: he keeps you at the door, and when you enter after three hours waiting he will tell you, 'I don't have time now. Come back tomorrow,' or 'next week,' and when you go back the next week he'll tell you, 'I don't know what I did with your papers.' These things happened to me, like I sent somebody there, and my paperwork was lost and my representative was told, 'I don't have time now, I have to go somewhere. Come back next Monday,' etc. ...This is a phenomenon we all know and it gets us angry, but there is nothing to do about it; so we must go on and hope that things will change in time.

Obtaining a loan from a bank is described by many of the managers as a very cumbersome and difficult process. Rigidity and poor service offered by the banks triggered the learning of several managers in this study. One manager offers an illustrative story. The Romanian market did not provide a domestic-made bus that would meet the international tourism/human transportation requirements, so the manager had to buy buses from Hungary. As these buses are not imported to Romania, an invoice from the vendor had to be presented to the bank which in a few days announced its decision for the amount of foreign currency. And then came the problem as he described it in the following passage:

> Well, if I had found a bus for sale in Hungary, the vendor will not wait for the money transfer, which can take from a week up to a month. He doesn't know me and he will not wait for a month to get his money, especially being in a different country. He is saying: 'Bring me the cash and I'll give you the merchandise, or send me the money and when I get it I will send you the bus.'.

Almost all of the managers talked about their problems in working with state-owned companies which still have the monopoly in a lot of fields and especially as suppliers of raw materials. These companies also prefer to work with other state-owned companies, leaving the private companies on the fringe. Describing the preference of state-owned businesses to deal with their own, and his major problem in getting contracts with the stores which were mostly state-owned, the manager of a sporting goods manufacturing company, said:

> They [state-owned stores] know that my products are good, but some of them just couldn't care less, and they say, 'why should I buy from him when the state-owned company's products are good enough?' There is a state-owned company which in the old times and even now is manufacturing backpacks, catastrophic ones, and better not to talk about their tents. So, they all knew each other these old state-owned businesses. The store managers had friends there, knew the director, the director knew I don't know who and they used to eat and drink together during the so called contract entering times. These old ways of deal makings are still in place. They are organized at the seaside or in other resorts. The only purpose of these gatherings was for the people to spend a good time on company money for two, three days or a week; to eat, drink and enjoy themselves. Thus, this was the essence of these contracting gatherings. In fact they didn't sign contracts, but displayed their products and left them under the surveillance of one or two unlucky young engineers while they were gone eating, having fun, taking a swim, etc. with the directors. So, there were situations like this that they [store managers] knew the director of the state-owned company and although I had products of much better quality, they didn't know me. 'We will go to the state-owned company and buy from them,' they said. If I told them to compare the two products, they told me, 'No, last year we bought our products from them, too.' This is exactly like the story with the street curve. Yesterday I drove in the other lane to cut the curve and

> nothing happened, so I can do it again today. They also bought the same products last year from that company, so this is the mentality.

The old regime mentality and poor work ethic of the employees was another source of major problems according to the managers. The managers interviewed also talked about the mentality of some managers in Romania. One person said:

> And talking about managers, I think that they should try to gather good people in their companies, but this is again a contradiction of the previous mentality when the boss tried to get rid of all the good employees in order to eliminate potential competitors. You see, there are things like these which bring extraordinary contradictions and create problems because a lot of people have still the old mentality. They cannot realize that if you have a good company and you gather around you only incompetent people you are doomed to failure together with your company.

As these examples show, these managers viewed their context as being the whole economic, political and social environment of Romania as part of Central and Eastern Europe. The lenses through which they saw their world framed their critical incidents and learning experiences. The context was sometimes interpreted as a macro level trigger of critical incidents, as a barrier in finding solutions to their problem, or sometimes as offering potential opportunities. Although the context of learning, which is used to test possible solutions, is mentioned in Marsick and Watkins' (1990, 1997) models, its pervasive influence on each phase of the learning process documented here is not depicted in their model.

Analyzing the managers' learning experiences, it also became apparent that the language used in Marsick and Watkins' models (1990, 1997) did not fit the language used by the participants, so further modification of the models seemed appropriate. We therefore have re-labeled the components of Marsick and Watkins' models and embedded the entire model in the context. We created the following new labels: "Frame the context" instead of "Problem framing" or "Frame the experience"; "Triggers" instead of "Diagnosis" or "Experience challenges"; "Choose learning strategies" instead of "Learning to produce invention" or "Reflect in and on action"; and "Evaluate lessons learned" instead of "Evaluation/generalization" or "Plan next steps." An empirically grounded re-conceptualization of the original models into a model (Figure 3) that incorporates the learning processes both in terms of the sequences in which people engaged in them and the language they used to describe them is the result of this exploration.

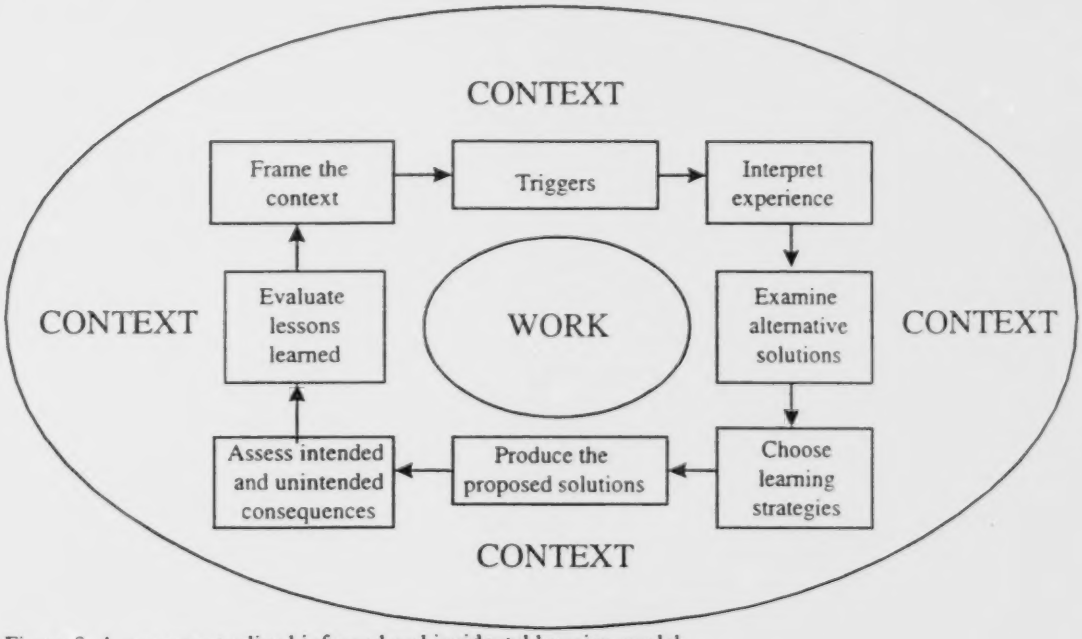

Figure 3. A re-conceptualized informal and incidental learning model

Conclusions and Implications

Reading these critical incidents, it might be reasonable to wonder whether or not this context is too unique to warrant re-conceptualizing this model. Our view is that the extremity of these examples actually made more visible the changes we needed to make in the model. This re-conceptualized model presented in Figure 3 extends Marsick and Watkins' (1990, 1997) and Watkins and Marsick's (1992) theoretical framework and models of informal and incidental learning in the workplace. This model encompasses the learning perspectives of small business owner-managers who work in a volatile political and economic environment, a group that has not been represented in previous research based on these models. Future research may be guided by a stronger, more empirically derived model of learning in the workplace.

References

Ahmad, Z. A. (1994). Chief academic officers as learners: Adult learning patterns within an organizational context. Dissertation Abstracts International, 55-07A, 1785. (University Microfilms No. AAI9430221)

Argyris, C., & Schön, D. A. (1978). Organizational learning: A theory of action perspective. San Francisco: Jossey-Bass.

Bell, C. R. (1977). Informal learning in organizations. Personnel Journal, 56(6), 280-283, 313.

Bierema, L. L. (1996). How executive women learn corporate culture. Human Resource Development Quarterly, 7(2), 145-164.

Brookfield, S. (1983). Adult learners, adult education and the community. New York: Teachers College Press.

Carrigan, S. M. (1989). An exploratory study of the contribution of human resource development to high performance among high-tech salespeople. Dissertation Abstracts International, 50-05A, 1234. (University Microfilms No. AAI8916989)

Carter, G. (1995). Stroke survivors: Finding their way through informal and incidental learning. Unpublished doctoral dissertation, The University of Texas, Austin.

Center for Workforce Development & Education Development Center, Inc. (1998). The teaching firm: Where productive work and learning converge. Report on research findings and implications. Newton, MA: Education Development Center.

Child, J., & Czegledy, A. P. (1996). Managerial learning in the transformation of Eastern Europe: Some key issues. Organization Studies, 17(2), 167-179.

Cseh, M. (1998). Managerial learning in the transition to a free market economy in Romanian private companies. Unpublished doctoral dissertation, The University of Georgia, Athens.

Cseh, M. (1999). Contextual learning of owner-managers of small, successful Romanian companies. Proceedings of the Academy of Human Resource Development, USA.

Dechant, K. (1989). Managerial change in the workplace: Learning strategies of managers (Doctoral dissertation, Columbia University Teachers College, 1989). Dissertation Abstracts International, 50(08), 2349A.

Dewey, J. (1938). Experience and education. New York: Collier Books.

Diaz-Alemany, D. (1993). A naturalistic exploratory inquiry into the informal learning strategies of human resource development professionals. Dissertation Abstracts International, 54-12A, 4342. (University Microfilms No. AAI9413473)

Dowrick, T. K. (1992). Self-reported significant career and life experiences among selected Michigan schools superintendents. Dissertation Abstracts International, 53-03A, 0672. (University Microfilms No. AAI9223185)

Ellinger, A. D. (1997). Managers as facilitators of learning in learning organizations. Unpublished doctoral dissertation, The University of Georgia, Athens.

Garrick, J. (1998). Informal learning in corporate workplaces. Human Resource Development Quarterly, 9(2), 129-144.

Howe, W. A. (1991). Factors that facilitate or impede informal workplace learning among managers in a chapter of the American Red Cross. Dissertation Abstracts International, 52(07), 2370A. (University Microfiche No. AAC 9136399)

Jarvis, P. (1987). Adult learning in social context. London: Croom Helm.

Knowles, M. (1950). Informal adult education. New York: Association Press.

La Paro, M. E. (1991). Health care middle managers: What and how they learn. Dissertation Abstracts International, 52(02), 394A.

Larson, B. K. (1991). Informal workplace learning and partner relationships among paramedics in the prehospital setting. Dissertation Abstracts International, 52-02B, 0732. (University Microfilms No. AAI9121186)

Lewis, T. A. (1995). A study of the life histories of women administrators in adult education and their career development. Dissertation Abstracts International, 56-07A, 2577. (University Microfilms No. AAI9539833)

Lindemann, E. (1926). To discover the meaning of experience. Survey, 55, 545-546.

Lohman, C. M., & Woolf, N. H. (1998). Finding their own way: Informal learning and public school teachers. Proceedings of the Academy of Human Resource Development, USA, 918-925.

Macmahon, F. (1992). Learning informally to be a team player. Dissertation Abstracts International, 31-04, 1435. (University Microfilms No. AAIMM77196)

Marsick, V. J., & Watkins, K. E. (1990). Informal and incidental learning in the workplace. London: Routledge.

Marsick, V. J., & Watkins, K. E. (1997). Lessons from informal and incidental learning. In J. Burgoyne & M. Reynolds (Eds.), Management learning: Integrating perspectives in theory and practice (pp. 295-311). London: SAGE.

Mealman, C. A. (1991). Incidental learning by adults in a nontraditional degree program: A case study. Dissertation Abstracts International, 52-04A, 1178. (University Microfilms No. AAI9127673)

Menard, S. A. W. (1993). Critical learning incidents of female army nurse Vietnam veterans and their perceptions of organizational culture in a combat area. Unpublished doctoral dissertation, The University of Texas, Austin.

Merriam, S. B., & Caffarella, R. S. (1991). Learning in adulthood. San Francisco: Jossey-Bass.

Mocker, D. W., & Spear, G. E. (1982). Lifelong learning: Formal, nonformal, informal, and self-directed (Contract No. NIE-C-400-81-0025). Columbus, Ohio: The National Center for Research in Vocational Education, The Ohio State University.

Morton, S. T. (1993). Socialization-related learning, job satisfaction, and commitment for new employees in a federal agency. Dissertation Abstracts International, 54-07A, 2431. (University Microfilms No. AAI9331468)

Mott, V. W. (1994). A phenomenological inquiry into the role of intuition in reflective adult education practice. Dissertation Abstracts International, 55-10A, 3067. (University Microfilms No. AAI9507229)

Murray, M. E. (1993). Informal learning approaches of clinical nurses as they become effective first line managers. Dissertation Abstracts International, 54-08B, 4082. (University Microfilms No. AAI9400585)

Rossi, L. R. (1995). How nurses gain clinical expertise through informal learning in the workplace. Dissertation Abstracts international, 56-07A, 2532. (University Microfilms No. AAI9539858)

Selke-Kern, B. E. (1986). Development of educators' motivational orientations toward intentional learning. Dissertation Abstracts International, 47-12A, 4268. (University Microfilms No. AAI8706102)

Shapiro, M. M. (1994). How professionals learn to make involuntary career changes successfully. Dissertation Abstracts International, 55-11A, 3386. (University Microfilms No. AAI9511088)

Stevens, K. A. (1993). Going through change and coming out whole: How individuals learn to handle organizational change. Dissertation Abstracts International, 54-12A, 4334. (University Microfilms No. AAI9414462)

Volpe, M. (1992). The relationship between organizational change and informal learning in the workplace. Dissertation Abstracts International, 53-05A, 1369. (University Microfilms No. AAI9228528)

Watkins, K. E., & Marsick, V. J. (1992). Towards a theory of informal and incidental learning in organizations. International Journal of Lifelong Education, 11(4), 287-300.

Creativity and Design

Sharon J. Korth
Brenda S. Gardner
Xavier University

The creative processes and attributes of ten HRD practitioners were examined in this study, using both qualitative and quantitative methods. Results include a comparison of creativity styles/preferences using the Myers-Briggs Type Indicator and the Kirton Adaption Innovation Inventory as well as a model derived from the data, which describes the creative design process used by the subjects.

Keywords: Creativity, Design, Personality Preferences

This research explored the creative processes involved in the design of human resource development (HRD) interventions. These interventions include systems, processes, and programs to help people gain knowledge and skills so that they can improve their individual, group and organizational performance. Common HRD interventions include training programs, team building consultation, and strategic planning facilitation. While there are models and guidelines for developing these interventions, there is little research on the creative processes involved in their design. For example, how does one generate a novel idea, select an effective strategy, or determine a successful mix of learning activities?

Problem Statement and Theoretical Framework

There is substantial literature and research on designing HRD interventions, both in the areas of training and consultation. Many of these instructional and consulting models offer a step-by-step process to the overall intervention (Block, 1981; Dick & Carey, 1990; Kemp, Morrison & Ross, 1994). Recently, there have been discussions about the iterative, holistic, and chaotic nature of the process as actually practiced, which has resulted in instructional design models with flexible and fluid boundaries, with choices and options, or with numerous recycling loops (Korth, 1997; Seels, 1995; Tessmer & Wedman, 1995).

"To design is to create some new thing of practical utility. The basic act of design is to leap out from what exists to something previously unimagined" (Rowland, 1994, p. 3). Whereas research has been conducted on what designers do in practice (Perez & Emery, 1995; Rowland, 1992), little research has focused on how designers actually make that leap, how they come up with ideas that were previously unimagined.

What is the creative element in this design process? Creativity is commonly defined as the production of ideas that are novel and useful (Puccio, Treffinger & Talbot, 1995). There has been an increased interest in corporate creativity, with studies exploring how innovation and improvement "actually happen" in organizations and identifying elements that enhance employee creativity (Oldham & Cummings, 1996; Robinson & Stern, 1997). But how does this creative process work for training and organization development professionals who are designing HRD interventions? Several writers have been exploring the element of creativity in instructional design. Nelson (1994) discusses being undisciplined and out of control as enhancing creativity. Rowland & Wilson (1994) offer possibilities as to how designers can balance seemingly paradoxical issues to make decisions regarding the design.

Outside of the design discipline, much has been written on the creative process in general. While the various processes involved in creation are complex and interfused, researchers have been documenting generic stages of the process since the 1920's (Wallas, 1926). Wallas' stages, which have served as a framework for understanding the creative process, include: (1) preparation, where the person does both formal and informal work by studying, thinking, searching for answers; (2) incubation, when the process rests and the unconscious mind takes over in order to organize, synthesize and transform ideas; (3) inspiration, which brings the process to a climax when everything falls into place with a Eureka; and (4) verification, measuring the product to both internal and external criteria.

How are the design and creative processes interrelated? Where is creativity used during the process of designing HRD interventions? Can the lessons from one discipline (creativity) inform and enhance the other (design)? The purpose of this research is to explore the creativity styles/preferences of HRD practitioners and to examine the creative elements of the design process.

Copyright © 1999 Brenda S. Gardner

Research Questions

Do HRD practitioners engage in creative processes? What are the creative parts of the HRD intervention design process? What are similarities and differences in the creative practices of HRD practitioners? What are the relationships, if any, between types or levels of creativity, personality preferences, and HRD practitioners' descriptions of their design processes? How could this information be of use to HRD professionals, faculty, and researchers?

Methodology

A qualitative approach was used in this study due to the nature of the research questions. The researchers wanted to capture data on the perceptions and practices from the insider's perspective. Specifically, the collective case study approach was used, which involves multiple cases in order to shed light on a complex phenomenon or population (Stake, 1994), in this case the creative processes employed by HRD professionals while designing interventions.

Data Collection

The primary means of data collection was individual interviews. The first interview was comprised of a series of questions related to the creative processes involved in intervention design. The tone of the interview was informal because the researchers wanted the subjects to feel comfortable talking about their experiences. The second round of interviews included some specific questions, but also some activities, including a drawing task, a word association activity, and reaction to a specific situation in a case scenario.

In addition to the interviews, two instruments were administered to the subjects, the Myers-Briggs Type Indicator (MBTI) (Form G) and the Kirton Adaption Innovation Inventory (KAI)*. The MBTI is based on the work of Swiss psychotherapist Carl Jung (Myers, 1993) and reflects individual preferences for energy (Extraversion and Introversion), information gathering (Sensing and Intuition), decision making (Thinking and Feeling), and lifestyle (Judging and Perceiving). Each of these four dimensions is measured on a scale; sixteen unique personality types result from the combination of the four MBTI preference scales.

The KAI (Kirton, 1987) is a 33-item self-report inventory to measure cognitive style in creativity, problem solving, and decision making. Kirton (1976) theorized that there are two different styles of creativity, adaption and innovation, and developed the KAI, which locates the respondent on a continuum ranging between high adaption and high innovation, corresponding with low-high scores. Adaptors tend to use available procedures and approaches to problems, whereas innovators try to restructure problems and use less conventional approaches. Possible scores on the KAI range from 32 to 160, with a standard deviation of 16. Scores above 96 characterize innovators and scores below 96 characterize adaptors.

Subjects

The ten subjects in this study were selected by the researchers, from a pool of known local HRD professionals, because of their considerable experience in designing a variety of HRD interventions. The researchers did not attempt to categorize subjects as to perceived types or levels of creativity as part of the selection process. The subjects include four males and six females, and their years of HRD professional experience range from 7 to 19 with the average of 12.9. The subjects' prior and current work experience includes private, public, and non-profit across the following areas: health care, retail, pharmaceutical, service, manufacturing, banking, telecommunication, social services, and volunteer organizations/boards. Types of interventions with which the subjects have experience include: teambuilding, executive coaching, career development, training (technical and non-technical), management and leadership development, group facilitation, train the trainer, strategic planning, OD interventions, quality improvement, and conflict resolution.

Data Analysis

The twenty interviews were audiotaped and transcribed. The qualitative data analysis software, Non-numeric Unstructured Data Indexing Searching and Theorizing (NUD*IST 4) (Qualitative Solutions & research Pty. Ltd., 1997), was used to aid in the coding, indexing, and sorting process as themes, commonalities, and differences emerged from the data. Data analysis occurred simultaneously and sequentially using the constant comparative method (Lincoln & Guba, 1985). The researchers continuously reflected on the meaning of what was heard and the direction in which the research should go next, constantly comparing the data against themes and looking for data that both confirmed and disconfirmed interpretations. Several tactics for generating meaning were employed throughout the research, including: noting patterns, seeing plausibility, clustering, splitting variables, subsuming particulars into the general, noting relations between variables, and making conceptual/theoretical coherence (Miles & Huberman, 1994). In addition, in order to increase the validity and reliability of the data, the researchers checked for representativeness and researcher effects, triangulated the data by utilizing a variety of collection techniques, used extreme examples, and solicited feedback from informants.

Results

The results of the KAI and MBTI are displayed on Table 1.

Table 1. Relationship Between MBTI & KAI Scores

Subject	Myers-Briggs Type Indicator (MBTI) Personality Type	MBTI Creativity Dimensions	Kirton Adaption-Innovation Inventory (KAI)	
G	ESTJ	SJ	84	Adaptor
J	ESFJ	SJ	86	Adaptor
B	ISTJ	SJ	105	Innovator
F	ESFJ	SJ	105	Innovator
H	ENFJ	NJ	112	Innovator
A	ENFJ	NJ	115	Innovator
I	ENFJ	NJ	124	Innovator
E	INTP	NP	130	Innovator
C	ENTP	NP	134	Innovator
D	ENFP	NP	138	Innovator

The scores on the KAI ranged from 84 to 138, identifying two subjects as adaptors and eight as innovators. MBTI scores showed that the ten subjects represented seven different types. Creativity research using the MBTI has determined that two of the four dimensions are related to creativity -- the information-gathering preference (S-N) and the lifestyles preference (J-P). Intuition (N) and Perception (P) are shown to be related to higher levels of creativity (Myers & McCaulley, 1985). Pairing the information-gathering preference (S-N) and lifestyles preference (J-P) shows that four subjects have the SJ combination, three have the NJ combination, three have the NP combination, and none have the SP combination. Interestingly, the MBTI combinations correspond to the KAI results. Those with the SJ preferences have the lowest KAI scores (indicating adaption), those with the NJ preference have the middle KAI scores, and those with the NP preferences have the highest KAI scores (indicating innovation). This is consistent with other research involving the KAI and MBTI (Carne & Kirton, 1982; Gryskiewicz & Tullar, 1995) which found that preferences for N and P were associated with an innovative style.

The results of the qualitative data analysis reveal similarities and differences among the subject related to their creative processes. The similarities will be described in a model that the researchers derived from their data, while key differences will be subsequently discussed in relation to that model. The phases in the creative-design process that emerged from the data are: (1) Diagnosis, (2) Immersion, (3) Percolation, (4) Aha, and (5) Checking (DIPAC).

Phase 1: Diagnosis

What is the problem? What is the cause of the problem? What is the desired result? What are potential solutions? Who needs to be involved in gathering and analyzing this information? This phase involves understanding the problem/situation and expected outcome, as well as determining the cause and a potential intervention strategy or solution(s). All ten subjects described this phase as rational, logical, and collaborative, where they worked jointly with stakeholders to identify the business need and the expected outcome. One subject mentioned that this was basically an analytical phase of the process, but creativity was needed to figure out how to involve the right people in the data collection and decision-making. Much of the discussions across the subjects focused on digging below the surface of the original problem to find the root cause of the issue.

Subject D: "Instead of providing them with solutions, what I'm doing is asking a series of questions to really uncover what they think the problem is and to find out if that is actually the problem. I want to know what they think is the problem and what they see as the essential obstacles or perhaps what they've tried, what's worked, what hasn't. And through this questioning process I start formulating what might be done as an intervention and ideas about the depth of the intervention"

Subject I: "One thing I do right up front is identify very clearly the business needs that we are addressing with this and what the behavioral or the desired performance is going to look like afterwards, so we have some sort of measurement. Here's where we are today, we know that, here's what we want to achieve, here's why, and this is what this behavior should look like when we're done."

Phase 2: Immersion

How do I think about the design options in ways that help me make decisions? How do I explore all reasonable options? How do I tap into my own reserve of knowledge and experience? Who, what, and where are my resources for ideas? How do I gather information and conduct research? This phase involves generating ideas for the intervention and was commonly characterized by the subjects as creative, in contrast to the prior more rational diagnostic process. It involves gathering information, conducting research, and consciously playing with that information in ways that will lead to making decisions about "how" the intervention will take place. The subjects utilized many techniques to help them in this phase of the process, which included: reading; talking to others; researching on the Internet; going to personal files; recalling related past experiences; using display tools such as sticky notes and the computer; thinking about the intervention from the perspective of the learner; and looking around at everyday life events to look for resources and ideas. Many of the subjects mentioned visualization and mental imagery as an important part of the process.

Subject E: "If you don't immerse yourself in the topic and just kind of think about all of the things that you know, you miss out on so much. I make a mess. I clean off my desk, I'll write notes, I use my memory, the PC, e-mail notes, little stick-ums everywhere. I have folders on everything."

Subject J: "We'll just let it be free flowing and we'll brainstorm with yellow stickies from our own experience, from our knowledge, from the information we received at the intake, from a whole variety of sources. If we find that we need more information then we'll hone in on those particular areas and we'll do literature searches, we'll go to the Internet, we'll go to the library, journals, a whole variety of places to get additional information."

Phase 3: Percolation

How do I help the ideas grow and gel? What enhances the synthesis process? How important is it that I have a chance to get away from the data generated in the immersion phase? In contrast to the prior phase, this phase involves the subconscious. In this phase, subjects are purposefully tapping into their subconscious, knowing that the ideas are still there and not finalized, but letting the ideas rest. Terms used to describe this phase included: germinate and grow, let it stew, incubate, simmer, sleeping on it, stewing in my brain, putting it on the back burner.

Subject A: "I put it on the back burner and I'm still tending to it in some sense but it may not have my full attention at that point. You know what you're working on it and the brain is always going off in different directions. There are times when I just have to shut if off and go do something else...Your subconscious – I think it's nothing more than a bunch of experiences all tied up together and wreaking havoc back there."

Subject B: "The complementary activity (to immersion) is to just get completely away from that and do something that would seem on the surface to be totally unrelated, which is to go run, swim, sit in the sun, or do needlework. I find that some kinds of incubation activities are creative, like needlework or sewing. I love to sew

and it's not just to get my sewing out of the way, or knitting something, or do something physical. It gets my mind off of it."

Phase 4: Aha!

When does the breakthrough come? Where and how do the inspirational ideas emerge? This phase is where the illumination, the breakthrough, the insight happens! Most subjects described their breakthrough moments as coming out of the subconscious percolation phase. Furthermore, most of the insights occurred away from the formal work environment, such as when taking a walk, driving, or taking a shower. This "aha" moment was described as magical and mysterious, and subjects claimed it was accompanied with a surge of energy and focus. One subject explained how it sometimes happens when you are talking to someone and how it is difficult to continue the conversation when this insight on some other topic has just occurred.

Subject C: "When I'm at home, to relax, I do things like crossword puzzles and jigsaw puzzles. I think it relaxes me because it's kind of a Zen-y thing, like I have to think about this but I'm not really thinking about anything, but I'm thinking underneath it. It is often when I'm doing some of that unconscious processing that ideas pop up. I had one (aha) standing home one weekend ironing. It had been kind of tossing around in my head for several days and then it bubbled up. I feel that intuition is nothing more than just accessing data that you don't realize you're accessing."

Subject F: "It's usually not sitting at my desk. I lot of my ahas happen with I'm driving. If something has occurred to me I will write it on a piece of scrap paper and put it near the file."

Phase 5: Checking

How do I know if my idea will work? How do I validate or verify this insight that has just occurred to me? How do I decide if I will go ahead and incorporate this idea into the design? This phase involves determining if you will move forward and actually use the "aha." Subjects described a variety of ways to validate their ideas. Interestingly, most said that they trust their gut or their instinct. If the idea has come from the prior steps in the creative-design process, it seems to be right. Techniques mentioned by subjects included: checking their idea against their prior experiences, seeing if it will support the goals developed in the diagnosis phase, checking for content-relevance, talking to someone who has done similar interventions, running it by a trusted colleague, or getting feedback from someone who has an opposite style. After this first phase of confirmation, most subjects mentioned formalizing the ideas by writing them up and getting feedback from the client or stakeholders in the process. But in general, the subjects remarked that when an idea emerged from this process, there was usually an intuitive sense that the idea was right!

Subject G: "Usually I start calling someone I know who has done something that may be similar and try to bounce ideas off of them, so I use that network. It's pretty intuitive. I can't pin down how I decide except that I'm always focusing on the goals or the outcomes and as long as I keep that clearly in mind then I keep going back and testing, 'Is this going to meet the goal or not?'"

Subject H: "I usually run it by a few people in HRD in our company that may not necessarily be in my division. That's usually what I do, but to be quite honest, I trust my instincts a lot, probably more. I kind of know right after it has come out of the incubation period that it's probably the right thing to do and it's going to fly really well."

Summary

This five-phased model for the creative aspects of the HRD intervention design process is a collective description of the subjects' processes. While there were many consistencies in the general phases, there were individual differences within the phases. Each subject seems to have developed an effective, successful individualized process and has a sense of confidence, not panic, that ideas will pull together when needed. The subjects "trusted the process." Subject D recounted: "I've gotten comfortable with that sense that there will be that period of void -- there will be that period of blackness or blankness or whatever you call it, and that somehow in immersing myself in content and then trusting the creative process that I've come to know as my own creative process, it really will all make sense. Whenever I can take advantage of that incubation period I think it results in a much higher quality product." Subject H described it: "It always comes together but I don't know how. It can make your manager a little nervous at times. But I've always been able to somehow magically pull things together. And

scary as it is, sometimes it's the night before. I always have a large amount of faith that it will come to me. It's not a planned thing. If I sat down and said, 'OK, tomorrow I'm going to plan how to do this,' it would not fly because it happens very spontaneously with me. All of a sudden I'll get one idea and all of these things start spinning off of that."

Differences

While there were many similarities across the subjects' descriptions of their processes, which are captured in the aforementioned creative-design model, there were also some notable differences. For example, almost without exception, Subject D had a different perspective than the other nine subjects. The general difference was that the HRD interventions described by Subject D were those involving on-the-spot facilitation, where design decisions were made in the moment, based on what is happening with the group members. The other nine subjects described both training and facilitation-type interventions, but all of the interventions involved a considerable amount of pre-planning (even of their facilitation interventions). All of Subject D's design happened in real time. The only place where there were similarities between Subject D and the others was in the diagnostic phase of the process, when the situation was being assessed, prior to determining or planning the approach or strategy. While Subject D has MBTI preferences of ENFP and the highest KAI score of 138, it is not known whether this distinction from the others is due to personality or creativity differences, differences in job responsibilities, and/or philosophical differences.

Another difference that appeared in the data analysis was that three subjects, A, H, and I, continually talked about how their professional and personal lives were intertwined. Without specific solicitation from questions, these three described how the resources for their intervention ideas were "everywhere" and that insights gained for their personal development also contributed ideas for their work-related interventions. Furthermore, Subjects A and H talked about how it is often difficult to turn off the ideas, that they are constantly bombarded with thoughts that relate back to their work and they have to monitor themselves so that it does not get out of control. Subject H said, "It's scary at times, because I get where I can't stop. I realize that I need to constrain the number of things." Subject A said, "Now the worst part of it is that when I get an idea I can't let go of it. In some ways it's like I never stop. It's almost like a sick obsession after a while because you never stop thinking about what you could do with this or when could apply that. I've gone so far as to grab toys out of my kid's happy meal because I think somewhere this is going to give me an idea of something I can do." Interestingly, these three subjects all have the ENFJ preferences (NJ function) and cluster in the mid-segment of KAI scores, from 112-124.

Conclusions

The creative-design process (DIPAC) derived from this research can be related to a generic instructional system design (ISD) model (Analysis, Design, Development, Implementation, and Evaluation (ADDIE) and Block's consulting model. Phase 1 of the DIPAC model, Diagnosis, relates to the analysis phase of the ISD model and the first three phases of Block's (1981) consulting model: (1) entry and contracting, (2) data collection and diagnosis, and (3) feedback and the decision to act. Phases 2-5 of the DIPAC model, Immersion, Percolation, Aha, and Checking, refer to the design phase of the ISD model and the implementation phase of Block's model, where the actual design of the intervention is embedded. Basically, the DIPAC model elaborates on specific parts of the process. It provides detail on how ideas are generated and decisions are made in the pre-planning or the design of the intervention. The detailed creative-design model that emerged from this research is very similar to the phases in the Wallas (1926) creativity model, but the steps are focused more specifically on designing HRD interventions and include an extensive analysis process.

While there were clear similarities across subjects that led to the creation of the DIPAC model, there are individual differences between subjects within each of the phases, resulting in a personal creative-design process. Also, there were distinctions between design and decision making that occurs before the event (for action) and design and decision making that happens during the event (in action). This was evident in the disparate responses from Subject D. Also, although some results did not appear that might have been expected, such as clear distinctions between the activities of adaptors and innovators, a relationship was shown between the MBTI and the KAI scores, indicating that both instruments are measuring similar elements related to creativity. Also, the three subjects with the ENFJ preferences and the 112-124 KAI scores demonstrated a strong integration of work and personal life throughout the design process, indicating that some differences could be related to personality preferences and creativity styles.

Finally, the design and creative process seem to be very interrelated. The subjects in this research, all experienced, successful HRD professionals, have learned to develop their own individualized version of this creative-design process and to trust that this process will help them generate useful ideas.

Limitations

The research involved a small number of subjects and was based on self-report data of thought processes or activities that could not easily be observed. As with any interpretive research, unintentional bias or subjectivity of the researchers is possible in the selection of the subjects, data collection, and analysis. The subjects in this case were a convenience sample from a pool of experienced HRD practitioners known to the researchers. This research is preliminary and calls for further study, both qualitative and quantitative, to validate and further explore the results. Additional research is needed to follow through with the implementation of the design ideas, to evaluate the effectiveness of the design on meeting the original goals, and finding relationships between the creative process and a successful "product." Another limitation of this research is that it is mainly focused on pre-planning events, so much more could be revealed by studying design decisions made in-the-moment, and comparing the two processes. Yet another aspect of creativity not explored in this study is the effect of inhibited creativity on both the design and the end result. Furthermore, this research focused on experienced practitioners; it did not offer a comparison between novices and experts. Finally, there are those who would resist the creation of any model related to the creative process and would regard a creativity model as an oxymoron.

Contribution to HRD Field

There is a current interest in embedding the instructional design process within a performance improvement framework, where effecting organizational goals is paramount. Furthermore, there is much interest in the area of creativity; organizations are recognizing the importance of enhancing the creativity of their employees, and researchers in the instructional design areas are searching for ways to understand and describe the creative elements of this process. This research makes a contribution across these areas. The creative-design model proposed by this study includes a diagnostic phase which addresses the performance improvement perspective, highlighting the importance of clearly understanding the problem within the context of organizational goals and finding collaborative ways to determine the root cause and appropriate solutions. The model also shows where creativity is important in design – where design and creativity merge. Basically, the creative elements of the design process are when professionals are trying to figure out "how" the intervention will take place. By deriving a model from practice and drawing parallels to models of performance technology, instructional design, and creativity, the disciplines become more integrated and fluid.

Practitioners could use this model to reflect upon and compare with their current practice. Use of this model for practice encourages professionals to engage in the activities that foster creative insight. Faculty who teach in areas related to intervention design could offer the model along with other design models to raise awareness of the role of creativity in the design process. Researchers could work to validate and expand this model. Specific areas for further research include comparing designing-for-action and designing-in-action, comparing novice and expert creative practices and results, and looking for relationships between creative design practices and improved organizational outcomes. This model is just a starting point for further exploration and debate regarding creativity in designing HRD interventions.

References

Block, P. (1981). Flawless consulting: A guide to getting your expertise used. San Diego, CA: Pfeiffer.

Carne, G. C., & Kirton, M. J. (1982). Styles of creativity: Test score correlations between Kirton Adaption-Innovation Inventory and Myers-Briggs Type Indicator. Psychological Reports, 50, 31-36.

Dick, W., & Carey, L. (1990). The systematic design of instruction (3rd ed.). Glenview, IL: Scott, Forseman.

Gryskiewicz, N. D., & Tullar, W. L. (1995). The relationship between personality type and creativity among managers. Journal of Psychological Type, 32, 30-35.

Kemp, J. E., Morrison, G. R., & Ross, S. M. (1994). Designing effective instruction. New York: Merrill.

Kirton, M. J. (1976). Adaption and innovation: A descriptive measure. Journal of Applied Psychology, 61, 622-629.

Kirton, M. J. (1987). Kirton adaption-innovation inventory: Manual. Hatfield, UK: Occupational Research Centre.

Korth, S. J. (1997). Planning HRD interventions: What, why and how. Performance Improvement Quarterly, 10(4), 51-71.

Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Thousand Oaks, CA: Sage.

Miles, M. B., & Huberman, A. M. (1994). Qualitative data analysis: An expanded sourcebook (2nd ed.). Thousand Oaks, CA: Sage.

Myers, I. B. (1993). Introduction to type (5th ed.). Palo Alto, CA: Consulting Psychologists Press.

Myers, I. B., & McCaulley, M. H. (1985). Manual: A guide to the development and use of the Myers-Briggs Type Indicator. Palo Alto, CA: Consulting Psychologists Press.

Nelson, H. G. (1994). The necessity of being "undisciplined" and "out of control": Design action and systems thinking. Performance Improvement Quarterly, 7(3), 22-29.

Oldham, G. R., & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. Academy of Management Journal, 39(3), 607-635.

Perez, R. S., & Emery, C. D. (1995). Designer thinking: How novices and experts think about instructional design. Performance Improvement Quarterly, 8(3), 80-95.

Puccio, G. J., Treffinger, D. J., & Talbot, R. J. (1995). Exploratory examination of relationships between creativity styles and creative products. Creativity Research Journal, 8(2), 157-172.

Qualitative Solutions & Research Pty Ltd. (1997). QSR NUD*IST 4 user's guide: Software for qualitative data analysis (2nd ed.) Victoria, Australia: Author.

Robinson, A. G., & Stern, S. (1997). Corporate creativity: How innovation and improvement actually happen. San Francisco: Berrett-Koehler.

Rowland, G. (1992). What do instructional designers actually do? An initial investigation of expert practice. Performance Improvement Quarterly, 5(2), 65-86.

Rowland, G. (1994). It's the sound! Preface to the special issue on designing for human performance. Performance Improvement Quarterly, 7(3), 3-6.

Rowland, G., & Wilson, G. (1994). Liminal states in designing. Performance Improvement Quarterly, 7(3), 30-45.

Seels, B. B. (Ed.). (1995). Instructional design fundamentals: A reconsideration. Englewood Cliffs, NJ: Educational Technology.

Stake, R. E. (1994). Case studies. In N. K. Denzin & Y. S. Lincoln (Eds.). Handbook of qualitative research (pp. 236-247). Thousand Oaks, CA: Sage.

Tessmer, M., & Wedman, J. F. (1995). Context-sensitive instructional design models: A response to design research, studies, and criticism. Performance Improvement Quarterly, 8(3), 38-54.

Wallas, G. (1926). The art of thought. New York: Harcourt & Brace.

*Note: Assistance with the KAI testing was provided by a KAI certified user.

Contradictory Practices: Critical Feminist Perspectives on HRD and Workplace Learning

Sharon L. Howell
The Pennsylvania State University

Vicki K. Carter
The Pennsylvania State University

Fred M. Schied
The Pennsylvania State University

This study addressed HRD practice through the perspective of critical feminist scholarship including an analysis of feminist sociology of work, ethnographies of women in the workplace, feminist pedagogical theory and practice, and critical adult education. Specifically, the study examined the experiences surrounding HRD and learning in the workplace at two organizations over a six-month period. This research is part of a larger on-going project seeking an in-depth understanding of the relationship between work and knowledge production.

Keywords: Feminist, Critical, Qualitative

The purpose of this study was to explore the contradictions among critical feminist theory, Human Resource Development (HRD), and the reality of women's experience in the workplace. We believe that what is missing from the HRD literature, with its excessive managerial focus, is the centrality of workers' experiences of HRD and learning in the workplace. In particular, not only women's experiences but the gendered nature of work has not been addressed in the literature. The theoretical and empirical feminist scholarship on the sociology of work has assisted us in the analysis of the contradictory nature of current perspectives on HRD and workplace education. Increasingly, critical educators have begun to examine how HRD functions as an instrument for shaping and controlling workers. Our study extends this examination into critical feminist thought.

Theoretical Framework

Our inquiry is grounded in critical feminist theory. Feminist theory is interested in inquiry focused on agency, power relations, shifting positionalities, voice, individual experience, and socially constructed knowledge (Acker, Barry, & Esseveld, 1996; Tisdell, 1995). Although feminist theory is often oriented around the dynamics of gender, it is inclusive of the interests of others who have been marginalized by race, class, sexual orientation, language, and the practices and politics of educational systems (Lather, 1991a). Despite the agenda of inclusiveness, feminist theory has been described as lacking wholeness, due in part to the dominance of relatively privileged white women scholars (hooks, 1989; Johnson-Bailey & Cervero, 1996). Critical educators, however, define their field as epitomizing the democratic ideal and accept responsibility to work toward social justice and democracy (Briton, 1996; Cunningham, 1992; Kincheloe, 1999). Feminist theory and critical theory in education come together to disrupt the status quo in a myriad of learning environments by examining individual experiences as phenomena. Therefore, a critical feminist perspective considers issues of power as well as bringing out elements of affect, social justice, marginalization, and contextual links among both students' and instructors' social, political, historical, and cultural locations (Collins, 1990; Lather, 1991b; Lewis, 1990).

Research Design

Reflecting on our own experiences as workers and educators, we have found that the literature on work and learning, especially critical scholarly work, has helped us understand how the various dimensions of power operate in our own particular places of work (e.g., Butler, 1997; Graham, 1995; Hart, 1992, 1996; Hull, 1993; Luttrell, 1989; Stalker, 1996; Townley, 1994; Westwood, 1985). This critical reflection has also forced us to ask hard questions about the role education plays in the workplace. For example, who controls the goals, objectives, and definitions of learning and work, and for what purposes? Why does the assumption that workers personal objectives, visions, and points of view can and should be in alignment with management continue to go unquestioned? Is Human Resource Development imposed on workers for the purposes of organizational efficiency, productivity, and maximization of

Copyright © 1999 S. L. Howell, V. K. Carter & F. M. Schied,

profit ethical? Can the instrumental goals of training, the ongoing hierarchies of work, and the sustained balance of power relations in the workplace really be aligned with a feminist perspective? Based on these questions, we chose a qualitative approach for our inquiry because, in part, as McClure and Lopata (1996) stated: "Qualitative techniques are especially appropriate for use in situations where the research problem and the research setting are not well understood . . . When it is not clear what questions should be asked or what should be measured, a qualitative approach will be more useful." (p.11). Marshall and Rossman (1995) also link qualitative methods and studies of an exploratory and descriptive nature, particularly in cases of "contemporary" research, where phenomena are unfolding at the time of the study. Critical ethnography is a " . . . reflective process with a political purpose asking what could be, not just what is . . . seek[ing] to empower the subjects, not speaking for the subjects, but rather speaking 'to' and 'on behalf of' the subjects (Thomas, 1993, p. 4).

Following the work of Bartunek and Louis (1996), we designed this study as an insider/outsider team research project. Epistemologically grounded in the assumption that knowledge is a human construct and thus located in an interpretive paradigm, the basis of "insider inquiry" is that researchers are participants in the situation being studied and that how insiders and outsiders work together is of major importance. In particular, our research team is composed of people who differ in their physical and psychological connectedness to the research setting and focal questions being examined. The team assumes both responsibility and shared authority for the study, meeting weekly to discuss issues and analyze the data.

Our study was conducted at two sites. We followed the process for selecting key informants suggested by Patton (1990). At the first location, a manufacturing firm in northeastern United States, informants consisted of eight female hourly workers and the female training manager. The hourly workers' perspectives were those of women engaged in the production process. At the second site, also in the Northeast, two work units were examined by the study – one provided student services and the other instructional design services. This organization provided educational services including focuses on higher, continuing, informal, and professional education. One of the researchers worked at this site as a team leader and another as an instructional designer. Worker-informants included female clerical staff and professional staff. The two sites provided an excellent opportunity for an in-depth examination of key workplace learning issues across a broad spectrum of types of work and workers.

This ongoing study began with a research team of three female adult education doctoral students and a male adult education faculty member. All four of us had interests in, and experience with, workplace learning issues. At least one "insider" was employed in each of the two work sites where we conducted our research. For this specific study, the team consisted of three members all of whom work inside one of the two research sites. Having spent four years working together within a more or less traditional insider/outsider paradigm, we were comfortable with the processes and procedures we had worked out among the four-member team and, subsequently, a three-member team. However, as we considered what critical feminist perspectives on the workplace consisted of, the underlying structure and implications of the gendered nature of organizing our insider/outsider processes came to the surface. The two female members of the research team were "insiders" and the male participant was not, highlighting the complex issues of gender, voice, and power we were struggling to understand. Within our insider/outsider group of three, we now found ourselves confronting and opening for exploration the multi-layered aspects of the gendered nature of work at this micro-level as well as through the context of this study.

At the manufacturing facility, the research team began with observing activities on the shop floor and then conducting semi-structured interviews with hourly workers. The team observed and talked to workers about their jobs, their educational background, and the ramifications of workplace training initiatives. In addition to interviews with white, middle-aged, female workers averaging seventeen years on the job, as researchers we had complete access to workers on the shop floor, observing the manufacturing process and conducting informal interviews. Interviews were also conducted with the plant training manager, the site's "insider," who was keeping a reflective journal.

Now in its fourth year (Howell, Preston, Schied & Carter, 1996; Schied, Carter, Preston & Howell, 1997; Schied, Carter, Preston & Howell, 1998; Schied, Carter & Howell, forthcoming), this particular six-month critical ethnographic study was based upon reflective journals of the researchers, participant observation, and semi-structured interviews. We collaboratively designed the study including input from some of the participants, collected data, and interpreted results. Within a critical ethnographic paradigm, journal entries were examined, evaluated, and critiqued. Participation in formal HRD classes as well as informal and incidental learning activities were observed, field notes kept, and interviews recorded. Providing a rich database, journal entries became a means of writing as a way of knowing and a way of viewing HRD practice through interaction among researchers, written narrative, and the workplace as text (Fulwiler, 1987; Giroux, 1992; Kellner, 1989). Through participant observation and interviews, researchers had available on a daily basis, and in a social context, some of the reality-constituting interpretive practices through which women made meaning at work.

Collected data were coded and themes identified first by the workers and then the three-member research group. Subsequently themes were analyzed in order to identify, describe, and interpret data with the goal of uncovering patterns of significance and discussing them at a meta-theoretical level. During and following thematic coding, Erlandson, Harris, Skipper and Allen's (1993) four areas of trustworthiness for qualitative inquiry were addressed. 1) Credibility was established through comprehensive description and analysis of the workplace and the use of multiple techniques for collecting data. Triangulation occurred through multiple sources of data and peer reviews. 2) Transferability, or the applicability of findings to other contexts, became apparent in the commonalties among the other studies engaged through this research project and multiple work locations. 3) Dependability was provided through detailed description and reflection in journals, the coding scheme documentation, and descriptions of each analytic iteration. 4) Confirmability, the process of judging the findings of a study according to the focus of the research and not according to the biases of the researchers, was established through materials and data serving as repositories and traceable sources for the assertions made. Again, data coding schemes and journal reflections served as confirmable data repositories. Findings were integrated with existing critical feminist perspectives found in adult education, critical pedagogy, and sociology of work literature.

Contradictions with Existing HRD Theory and Practice

This study identified numerous areas of contradiction between a critical feminist perspective on work and learning and the practices of Human Resource Development. Because we cannot do justice to all the issues that emerged, we would like to discuss two of them in some detail and raise others, hoping to bring these unexamined perspectives forward for future discussion and research by workplace educators.

Women and Changing Organizational Hierarchies

At both sites we observed, as is the case in many workplaces, a flattening out of organizational hierarchies. In training terms this flattening out was described by educators at both research sites in positive terms as a way to bring decision-making opportunities to those who actually do the work thus giving them ownership in the processes of work. One way this was done was to have the women themselves do the training of new hires and fit that responsibility into their already full schedules. However, the women workers were much less positive about this development. The women pointed out that in practice this meant increased work and more responsibility without any real voice in what they thought was important. For example, one woman stated that:

> I think that right now they've [management] gotten themselves in a predicament where they need people and they don't have them . . . I don't think you should be running flat out at a job and trying to teach somebody how to do it also.

In fact in our observations, reflections, and interviews we saw a consistent theme of work intensification. Clerical staff at the second site, for instance, were asked to develop and deliver training in their area of expertise without any adjustment to their ongoing job responsibilities. Moreover, the staff had no illusions about how their jobs were changing. All this discussion of empowerment and letting workers engage in the decision making process meant more work but with no recourse to refuse or even question the additional tasks and assignments.

The feminist concept of voice becomes important at this point. In this environment the only acceptable voice is a cheerful, positive one. If a woman does not exhibit those kinds of attitudes and behaviors then she is seen as deficient as a team player, a non-cooperative individual, and an employee unwilling to take the additional responsibilities of increased worker decision making. These processes are, of course, defined by the organization and reinforced by Human Resource Development courses. Thus, after being told she had been enrolled in a transformational leadership class, one woman considered questioning the course's purpose and value but had second thoughts because " . . . again, still, and seemingly forever, I'm going to be seen as negative, cynical, skeptical, uncooperative and not a team player." Another worker who was told that she was not a team player and needed to work on becoming a 'cheerleader for management' commented sarcastically, " . . . guess I better break out the short skirt and pompoms."

As we were analyzing our data, several scenarios similar to those described above materialized. We began to connect these themes with feminist literature on work and learning. Specifically, organizational flattening is part of the argument asserting that our educational systems, despite data showing workers are more highly educated than at any other time (Cyert & Mowery, 1987, Munelly, 1987), are both the cause of and the solution to current economic issues (Shor, 1986). In particular, decision-making and continuous improvement processes located throughout this flatter organizational spectrum supposedly demand higher-skilled, better-educated workers even

though the design and organization of work indicates growing numbers of de-skilled jobs which do not draw upon or emphasize the requirement, or human capacity, to think and reason (Cyert & Mowery, 1987; Hart, 1996).

Mechthild Hart's (1996) critical feminist work in the field of adult education is one source of scholarship that discussed these issues. Hart described the disturbing aspects of the feminization of poverty, particularly in terms of its relationship with the sexist division of labor. The problem, according to much of the mainstream business and HRD literature (Handy, 1984; Rothwell, 1986; Shor, 1986) consists of a poorly educated workforce exacerbated by the entry of a higher percentage of women, minorities and immigrants into the workforce. One implication is that with a lower percentage of white men in the workplace there is a less than adequate base of human capital to apply to the current issues and needs of American business. The implication, and the ideology, of this position is clearly that non-male and non-White workers are less valuable and an across-the-board equating of women's work with low-skilled labor. Ironically, skills attributed to women as "natural" (patience, attention to detail, manual dexterity) such as work with microchips have now become viewed as higher-level skills, commonly compared to brain surgery, for which men are being retrained.

In addition, flatter organizations also have the effect of pushing more work to lower levels, levels where labor is cheaper and where the workforce becomes more polarized (Hart, 1996). Although some groups of women have found more highly-skilled work, many have been forced into lower-skilled minimum wage jobs. Gender, sexual orientation, age, class, and racial lines remain the points of polarization along with unequal distribution of skills, pay, and types of positions available (Hart, 1996; Schor, 1998). Our study suggests that Human Resource Development contributes to increasing the polarization through its deployment of generic skills in courses offered to workers. Examples of these types of courses include *Negaholics: How to Handle Negativity in the Workplace*, *Defining Your Role in a Changing Office Environment*, *Time Management: Regaining Control*, and *Thinking Power*. These classes, because they place the emphasis on the individual as deficient, help to create a docile, flexible, adjustable workforce that prepares workers to be resources rather than human beings. Furthermore, such classes devalue women's experience when they specifically describe women, particularly older women, as workers who resist change and insist upon maintaining and valuing their work-related experiences over generic skills, performance reviews, testing, and categorization of tasks. Modern work organizations devalue and attempt to discard workers' need for continuity, their rooting of work in life and personal experience, their sense of self, and a connection to others – all characteristics traditionally described as feminine. Employers often use training courses to help erase these characteristics. Moreover, training in new organizational structures, such as the flatter corporation with less-secure permanent positions and growing numbers of part-time jobs, helps to solidify worker expectations for low pay, poor work conditions, fewer benefits, increasing workloads, and lack of job security. According to Hart (1992), "the new workers will be 'working like women' whose 'flexible working patterns' have already made them into the preferred labor force in many instances" (p. 98-89). We saw a strong connection between our current research and what Handy (1984) noted 15 years ago: "It is ironic that just as women have begun to win their fight to lead the kinds of lives that men lead, those lives are beginning to shift towards the pattern from which women are escaping" (p. 162).

Our previous studies as well as this study exemplify some of these points. For example, at the manufacturing facility, testing, job re-evaluation, and training deployed via the Human Resource Development unit were used to further maximize profits by creating new job classifications that kept the mostly female workforce at near minimum wage levels. In another case, when the need for product dipped, senior workers, who had higher pay levels, were sent home while temporary workers, those with a lower hourly rate, continued on the job.

Disappearing Boundaries Among Work, Family, and Community

Morgan (1997) identified three types of interests that workers bring to the workplace. The intersection of *task interest*, one's job, *career interest*, visions of the future, *extramural interests*, commitments, values, beliefs from outside work, can be illustrated with three overlapping circles. There is constant tension among the three as individuals try to balance these intersecting areas of their lives. One way to understand this overlap and resulting tension is through the concept of a community of practice, " . . . a set of relations among persons, activity, and world, over time and in relation with other tangential communities of practice" (Lave & Wenger, 1991, p. 98). Given the multiple and overlapping communities of practice to which every individual belongs, Darrah (1996) questions where the boundaries of one ends and another starts. Within the discourse of the changing workplace, there is a blurring of the boundaries between Morgan's (1997) *task*, *career* and *extramural interests*. Kofman and Senge (1993), among others, discuss the concept of "communities of commitment," commitment where there is no hard line drawn between work and life outside of work. For example, two women juggling demanding full-time jobs and the raising of young children discussed the conflict they felt between the commitment to their jobs within a

collaborative work team environment and the second job awaiting them at home each night. They commented that there was often more comfort and support within the work environment than they found at home, where they began their second full-time job at the end of the day, often stressed and always tired. Research conducted by Hochschild (1997) indicates that these are not unusual tensions, with parents often voluntarily working longer hours on the job or taking work home, resulting in *task interest* consuming larger segments of time and commitment. However, "volunteering" to work longer hours can be caused by more than simply finding the work environment more supportive than the challenge of raising a family.

Schor (1992), in *The Overworked American*, provided data on the increased workloads being pushed on employees by employers in the United States. Over the past twenty years time spent on the job by the majority of workers at all levels steadily increased. However, since 1948 productivity of workers actually doubled. To have the same standard of living as in 1948 workers would only have to work a four-hour day. Leisure has become a casualty of the market economy with increased use of part-time and contract employment. As much as twenty percent of the workforce does not have enough work to make ends meet. At the same time, the work and spend cycle of the market economy causes increased levels of stress on the job. "Surprisingly, the high-powered jobs are not the most dangerous. The most stressful workplaces are the 'electronic sweatshops' and assembly lines where a demanding pace is coupled with virtually no individual discretion" (p.11).

Hamper (1986) described work on a General Motors assembly line where workers had figured out more efficient and faster ways to get their jobs done so that two people could actually share one job. This allowed the workers to alternate, one worker performing a more intensified multitasked job, allowing the other worker some release from the boredom of the assembly line. Now this type of worker-inspired job redesign falls under the continuous quality improvement expected of all workers. Instead of the increased efficiencies providing relief for workers, work is instead intensified. Both workers must now perform furiously all day instead of only half a day. While not all researchers agree that Americans are working longer (e.g., Robinson & Godbey, 1997), a new study just released by the Families and Work Institute about the increasingly intertwined nature of work and family, and the resulting increase in stress, links these issues to a workplace that requires more autonomy, demands continual learning, and provides less security (Bond, Galinsky & Swanberg, 1998).

Senge (1990) and Watkins and Marsick (1993), address these boundary issues only in a tangential way. In theory the learning organization, the ideal organization under the new capitalism, combines personal and work-related development. The learning organization is described as "family friendly", recognizing that productivity in the workplace relates to issues of family and community responsibility. Managers in learning organizations seek collaborative solutions to conflicts between family and work-related responsibilities. Flexible schedules, working at home, and the handling of family emergencies all test the skills of managers and are described as 'problems' to be managed (Watkins and Marsick, 1993).

Organizations often have "family friendly" policies in place, but many times these benefits are not used (Gee, Hull & Lankshear, 1996). Champy (1995), an expert in reengineering, described a series of weeklong workshops held at a hotel by Arizona Public Service to develop strategies for dealing with cultural issues, the new workforce paradigm, diversity, and the integrated person.

> We're looking for what we call "breakthrough concepts" to come out of these sessions. The hundred people go to the hotel, stay there, and meet every day in a conference room. People are allowed to leave at night if they have a need. A tenet of our culture is to help people balance their work and personal lives, and we would be going against that if we didn't allow people to go home. But generally we like them to stay because the sessions often go until 10 p.m. The idea is to get everybody stimulated about the topic and working together (p. 99).

What do employees take from such a message? It is all right to use an organizations "family friendly" policies, but only if it does not interfere with work? The supposedly friendly culture claims to provide interpersonal skills development and a strong commitment to individual as well as workplace development. In actual practice, commitment in many organizations is non-existent. Senge (1990) does not attempt to create a framework to address these kinds of issues, leaving it up to the individual to determine the balance between work and family based on individual vision and goals, along with a willingness to accept the consequences. Watkins and Marsick (1993) recognize the issues involved, providing a framework to begin dealing with them. In both cases, these solutions appear to be mostly available to upper level management because it is these kinds of positions that are designed for flexibility.

Our two research sites provided cases in point. In the factory, workers had just been trained in continuous quality, the expectation of teamwork and cooperation, and the value of loyalty to the company. However, one

BEST COPY AVAILABLE

woman on second-shift was permitted to see her daughter - dressed and on her way to her high school prom - only during her regularly scheduled break time and in the factory cafeteria. At the second site, clerical workers discussed at length the work they now were required to do that had previously been done by professional staff and/or managers. Their additional duties were assigned without benefit of increased pay or even management's acknowledgement of their new responsibilities.

Conclusions

We believe that our study raises some compelling concerns for those involved in HRD and workplace learning. We concur with others who have found the underlying concepts of HRD to be inherently anti-feminist and possibly anti-democratic (e.g., Butler, 1997; Calas & Smircich, 1993; Fenwick, 1998a, 1998b; Fletcher, 1994; Graham, 1995; Townley, 1994; Westwood, 1985). Feminist theory and feminist pedagogies are antithetical to a practice that locates people within economic systems that see humans as resources. Thus attempting to place feminism in the context of HRD fails to address the fundamental challenges feminist scholarship poses to discursive practices located within a human capital approach to knowledge production. Moreover, the rich ethnographies of women in the workplace reveal that many of the assumptions mainstream education, training and development hold about why women work and how women work in the office or on the shop floor are flawed. The very notion of who defines what productive work is, as well as how that work is rewarded, becomes central to any understanding of work and the role of knowledge production. Failure to tap into this research leaves human resource professionals and educators with an incomplete understanding of the relationship between work, gender, and knowledge production. Potentially this failure may also lead to designing workplace learning programs that have the unintended outcome of becoming oppressive systems, hidden in the rhetoric of so-called worker empowerment.

References

Acker, J., Barry, K., & Esseveld, J. (1991). Objectivity and truth: Problems in doing feminist research. Women's Studies International Forum, 6(4), 423-435.

Bartunek, J., & Louis, M. (1996). Insider/Outsider Team Research. Thousand Oaks, CA: Sage Publications.

Bond, J. T., Galinsky, E., & Swanberg, J. E. (1998). The 1997 national study of the changing workforce. New York: Families and Work Institute.

Briton, D. (1996). The modern practice of adult education: A postmodern critique. Albany, NY: State University of New York Press.

Butler, E. (1997). Persuasive discourses: Learning and the production of working subjects in a post-industrial era. Proceedings of the Lifelong Learning: Reality, Rhetoric & Public Policy Conference (pp. 63-69). Guilford, England: University of Surrey.

Calas, M. B., & Smircich, L. (1993). Dangerous liaisons: The "feminine-in-management" meets "globalization." Business Horizons, 36(2), 71-81.

Champy, J. (1995). Reengineering management: The mandate for new leadership. New York: HarperBusiness.

Collins, M. (1991). Adult education as vocation: A critical role for the adult educator. New York: Routledge.

Collins, P. H. (1990). Black feminist thought, knowledge, consciousness, and the politics of empowerment. Boston: Unwin Hyman.

Cunningham, P. (1992). From Freire to feminism: The North American experience with critical pedagogy. Adult Education Quarterly, 42(3), 180-191.

Cyert, R. M., & Mowery, D. C. (Eds.). (1987). Technology and employment. Washington, DC: National Academy Press.

Darrah, C. (1996). Learning and work: an exploration in industrial ethnography. New York: Garland.

Erlandson, D. A., Harris, E. L., Skipper, B. L., & Allen, S. D. (1993). Doing naturalistic inquiry: A guide to methods. Newbury Park, CA: Sage.

Fenwick, T. J. (1998a). Questioning the concept of the learning organization. In S. M. Scott, B. Spencer, & A. M. Thomas (Eds.). Learning for Life: Canadian Readings in Adult Education (pp. 140-152). Toronto: Thompson Educational Publishing.

Fenwick, T. J. (1998b). Women composing selves, seeking authenticity: a study of women's development in the workplace. International Journal of Lifelong Education, 17(3), 199-217.

Fletcher, J. (1994). Feminist standpoint research and management science. Journal of Management Inquiry, 3(1), 74-82.

Fulwiler, T. (Ed.). (1987). The journal book. Portsmouth, NY: Boynton/Cook.

Gee, P., Hull, G., & Lankshear, C. (1996). The new work order: Behind the language of the new capitalism. Boulder, CO: Westview Press.

Giroux, H. A. (1992). Border crossings: Cultural workers and the politics of education. New York: Routledge.

Graham, L. (1995). On the line at Subaru-Isuzu: The Japanese model and the American worker. Ithaca, NY: Cornell University Press.

Hamper, B. (1986). Rivethead: Tales from the assembly line. New York: Warner Books.

Handy, C. (1984). The future of work. Oxford: Basil Blackwell.

Hart, M. U. (1992). Working and educating for life: Feminist and international perspectives on adult education. New York: Routledge.

Hart, M. U. (1996). Educating cheap labour. In P. Raggatt, R. Edwards & N. Small (Eds.). The Learning Society: Challenges and Trends (pp. 96-111). New York: Routledge.

Hochschild, A. (1997). The time bind: When work becomes home and home becomes work. New York: Metropolitan Books.

Hooks, b. (1989). Talking back: Thinking feminist, thinking black. Boston: South End Press.

Hooks, b. (1994). Teaching to transgress. New York: Routledge.

Howell, S. L., Preston, J. A., Schied, F. M., & Carter, V. K. (1996). Creating a learning organization, creating a controlling organization: A case study of total quality management in an industrial setting. Proceedings of the 37th Annual Adult Education Research Conference (pp. 169-174). Tampa: University of South Florida.

Hull, G. (1993). Hearing other voices: A critical assessment of popular views on literacy and work.. Harvard Educational Review, 63(1), pp. 20-49.

Johnson-Bailey, J., & Cervero, R. (1997). Beyond facilitation in adult education: power dynamics in teaching and learning practices. Proceedings of the 27th Annual SCUTREA Conference (pp. 240-244). London, England: Birkbeck College, University of London.

Kellner, D. (1989). Critical theory, Marxism and modernity. Cambridge: Polity Press.

Kincheloe, J. L. (1999). How to tell the workers? The socioeconomic foundations of work and vocational education. Boulder, CO: Westview Press.

Kofman, F., & Senge, P. M. (1993). Communities of commitment: The heart of learning organizations. Organizational Dynamics, 22(2), 5-23.

Lather, P. (1991a). Feminist research in education, within/against. Geelong, Victoria: Deakin University.

Lather, P. (1991b). Getting smart, feminist research and pedagogy with/in the postmodern. New York: Routledge.

Lave, J., & Wenger, E. (1991). Situated learning: Legitimate peripheral participation. Cambridge: University Press.

Lewis, M. (1990). Interrupting patriarchy: Politics, resistance and transformation in the feminist classroom. Harvard Educational Review, 60(4), 467-488.

Luttrell, W. (1989). Working-class women's ways of knowing: Effects of gender, race, and class. Sociology of Education, 62(1), 33-46.

Marshall, C. & Rossman, G. (1995). Designing qualitative research (2nd ed.). Thousand Oaks, CA: Sage Publications.

McClure, C. R., & Lopata, C. (1996). Assessing the academic networked environment: Strategies and options. Washington, D.C.: Coalition for Networked Information.

Morgan, G. (1997). Images of organization. Thousand Oaks, CA: Sage.

Munelly, C. (1987). Learning participation: The worker's viewpoint. In V. J. Marsick (Ed.). Learning in the Workplace (pp. 79-95). London: Croom Helm.

Patton, M. Q. (1990). Qualitative evaluation and research methods (2nd ed.). Newbury Park, CA: Sage.

Robinson, J. P., & Godbey, G. (1997). Time for life: The surprising ways Americans use their time. University Park, PA: The Pennsylvania State University Press.

Rothwell, S. (1986). Working like women. In P. Ekins (Ed.). The Living Economy. London: Routledge and Kegan Paul.

Schied, F. M., Carter, V. K., Preston, J. A., & Howell, S. L. (1997). Knowledge as "quality non-conformance": A critical case study of ISO 9000 and adult education in the workplace. Proceedings of the 38th Annual Adult Education Research Conference (pp. 214-219). Stillwater, OK: Oklahoma State University.

Schied, F. M., Carter, V. K., Preston, J. A., & Howell, S. L. (1998). Complicity and control in the workplace: A critical case study of TQM, learning, and the management of knowledge. International Journal of Lifelong Education, 17(3), 157-172.

Schied, F. M., Carter, V. K., & Howell, S. L (forthcoming). Silent power: HRD and the management of learning in the workplace. In R. M. Cervero, A. L. Wilson & Associates (Eds.). In the eye of practice: Adult education, power, and society. San Francisco: Jossey-Bass.

Schor, J. B. (1992). The overworked American. New York: Basic Books.

Schor, J. B. (1998). The overspent American: Upscaling, downshifting, and the new consumer. New York: Basic Books.

Senge, P. (1990). The fifth discipline: The art and practice of the learning organization. New York: Doubleday.

Senge, P. (1993). Transforming the practice of management. Human Resource Development Quarterly, 4(1), 5-31.

Shor, I. (1986). Culture wars. New York: Methuen.

Stalker, J. (1996). Women and adult education: Rethinking androcentric research. Adult Education Quarterly, 46(2), 98-113.

Thomas, J. (1993). Doing critical ethnography. Newbury Park: Sage.

Tisdell, E. (1995). Creating inclusive adult learning environments: Insights from multicultural education and feminist pedagogy. Information Series No. 361. Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education.

Townley, B. (1994). Reframing human resource management: Power, ethics, and the subject at work. London: Sage.

Watkins, K. E., & Marsick, V. J. (1993). Sculpting the learning organization: Lessons in the art and science of systemic change. San Francisco: Jossey-Bass.

Westwood, S. (1985). All day, every day: Factory and family in the making of women's lives. Urbana, IL: University of Illinois Press.

Self and Team Development in Practice (STP) Walk Rally

Chiraprapha Tan Akaraborworn
University of Minnesota

Gary N. McLean
University of Minnesota

An evaluation study was conducted to assess strengths and weaknesses of an outdoor-based experiential training (OBET) program used in Thailand. Self and Team Development in Practice (STP) Walk Rally is used as the case. Most of the principles in adult theory, experiential learning theory, and Holton's HRD Evaluation Research and Measurement Model are met by the STP Walk Rally, but it cannot promise transfer of learning. In the Thai culture, "Sanuk," or having fun, is the best element of the training design. However, face-to-face feedback is not appropriate for Thais. Recommendations for practice and research are made.

Keywords: Team Building, Adventure Learning, Thailand HRD

Self and Team Development in Practice (STP) is a variant of Outdoor-Based Experiential Training (OBET) that uses experiential learning as a technique for delivering training content such as team building, leadership, and communication. STP Walk Rally was developed for Thai employees in 1990 by Teerasak Kambannarak, Suwadee Homchanchur, and staff members from Thai Yamasaki. Since 1990, STP Walk Rally has provided services for more than 200 companies in Thailand.

Problem Statement

STP Walk Rally and other Thai OBETs have gained popularity over the last decade, especially for team building. OBET is often misused because (a) documentation in the area is based on personal accounts rather than systematic studies; (b) there is a paucity of research in Thailand in this field; and (c) there is an absence of evaluation of outdoor development programs in Thailand. The effectiveness of STP Walk Rally and other Thai OBETs has been questioned by those who believe it is just for fun since the activities look like childish games. Even though many studies have been done in the U.S. and Europe regarding these issues, they have not shown clear results. In many cases, the research designs were weak and threatened the validity of the research.

Without research on STP Walk Rally, it is hard to credit it with success. Thus, STP Walk Rally will be investigated to determine its strengths and weaknesses. There are many theories and models that could be used, but only adult learning theory, experiential learning theory, and Holton's (1996) HRD Evaluation Research and Measurement Model were selected to evaluate this particular training program.

Research Question

What are the STP Walk Rally's strengths and weaknesses in the Thai context based on adult learning theory, experiential learning theory, and Holton's (1996) HRD Evaluation Research and Measurement Model?

Outdoor-Based Experiential Training

OBET is a training process that uses experiential learning methods to deliver training content. There are three types of general OBET programs: challenge courses, group initiatives, and wilderness travel activities. The differences between general OBET and the STP Walk Rally as used in Thailand will be described in this section.

Kolb (1993) described challenge courses or high ropes courses as consisting of a series of activities conducted in trees or on poles. The objectives of these courses are to develop self-confidence, to help individuals

Copyright © 1999 Chiraprapha Tan Akaraborworn & Gary N. McLean

confront fears and to increase their propensity for risk taking. Group initiatives, or low ropes courses (Baldwin, Wagner, & Roland, 1991), consist of a series of group problem-solving activities. Baldwin et al. (1991) indicated that low ropes courses create changes in group climate but do not change self-concept. The third type, wilderness-based activities, is presented as a multi-day expedition. The objectives of wilderness programs are team building, communication, trust, and group cohesion.

Most of the activities in Thai OBET are a combination of low ropes and wilderness-based activities, not high ropes activities. The expected results from OBET are team building, communication, problem solving, and group cohesion, rather than self-development. STP Walk Rally was originally used for team building only. Later, the program was applied to new employee orientation, improving job satisfaction, and improving participants' skills in areas such as leadership, management, and decision making. These objectives are different from most U.S. OBETs' objectives. In the U.S., OBET is often used for individual development and to increase self-esteem (Wagner, Baldwin, & Roland, 1991).

OBET has many other names. In this article, OBET will be used to represent any outdoor-based experiential training. "Walk Rally" is the most popular word for OBET in Thailand. In this article, STP Walk Rally will be used to refer to the specific STP program, while OBET will be used to refer to the general training approach.

OBET programs vary substantially from trainer to trainer. Ibbetson (1993) stated that the essence of OBET is to use simulated outdoor initiative activities as direct metaphors for many everyday occurrences. In this paper, OBET means a process that uses hands-on challenges or adventures, usually in the outdoors, combined with review and feedback, to improve workplace performance.

STP Walk Rally

STP Walk Rally is an experiential training program intended to enable trainees to have insights through learning by doing. Kijyanyong (1997) defined "Walk Rally" as an activity that provides trainees with self-experience and self-learning under competitive situations. STP Walk Rally is adapted from European Orienteering, Group Dynamics, and Japanese Walk Rally.

Orienteering

"Orienteering is land navigation by the use of a topographical map and compass" (NAGWS, 1976, p. 162). In STP Walk Rally, maps are used to direct the walk. To win the rally, participants have to work in teams. They are expected to help each other by reading the map and controlling the time. Teams have to get to checkpoints at a specific time.

Group Dynamics

Group Dynamics is the study of the interrelationships between participants of a group, how the group is formed, and how it reacts to other groups. Mathes (1968) stated that group dynamics describes what is happening in all groups at all times whether or not the participants recognize it. In STP Walk Rally, participants' behaviors are videotaped and are observed by facilitators. The tapes are played back to the participants. The participants are then encouraged to give feedback on their feelings and the changes that they have seen during the course.

Japanese Walk Rally

Shigeru Kobayashi developed a teaching technique called Walk Rally in the 1960s. Japanese Walk Rally is an OBET program that enhances collaboration and team building. The participants are divided into teams of about 8 to 10 people. The participants on each team are paired and each pair works together to obtain a score. The pairs' scores are added to get the team's total score. The team that has the highest score wins. This same system is used in the Thai STP Walk Rally.

STP Walk Rally's Characteristics

The main objectives of STP Walk Rally are to have participants learn through experiential learning activities how to develop themselves, as well as how to understand other people in order to work together. These

objectives are similar to the T-Group objectives that focus on learning about self and others (Rothwell, Sullivan, & McLean, 1995).

Each STP Walk Rally session consists of 40 to 50 participants. The participants should represent a variety of ages, genders, functions, and positions within a company. The program takes three days, including one day of traveling because the program is held at a remote site. However, STP Walk Rally can be tailored to meet the needs of different organizations or groups. STP Walk Rally can be divided into two phases: classroom training that prepares the participants to work in teams and experiential activities with participant involvement.

Phase I. In the half-day classroom-training phase, an instructor presents information about team building. Participants work in teams to set goals and objectives for their teams. Trainers use ice-breakers, games, psychological tests, and indoor experiential learning activities as alternative facilitation methods.

Phase II. Th experiential phase lasts one-and-a-half days. In this session, STP Walk Rally serves as a vehicle for practicing skills learned during Phase I. There are two rounds of walks. Before the first round, each team receives a map, time sheet, and set of rules. On the map are hints written in poems to lead the team from one checkpoint to the next. The team members decide which direction they should go. At each checkpoint, all team members have to report to a Walk Rally facilitator. They are presented with a challenge. Each team has to complete the challenge before they proceed to the next point. The participants' behaviors are videotaped. At the end of the walk, participants are given an hour to reflect on what they have learned. This is followed by a debrief session with STP facilitators. The winning team is announced and presented with a trophy.

The second round of the Walk Rally starts on the last day. Participants remain in the same teams. The second round is similar to the first round, but it has different activities and checkpoints. The challenges are more complicated. At the end of this session, debriefing is again provided. Participants are given time for self-reflection. They exchange feedback in person with their team members, thanking them and telling them what they would like them to improve in the future. From personal experience, most of the feedback is positive. There are two trophies for the second round, one for the winning team and one for the most-improved team.

STP Walk Rally Evaluation

Since no research has been done on STP Walk Rally, it is difficult to assess whether or not the program can bring about change in participants and their organizations. Adult learning theory, experiential learning theory, and Holton's (1996) HRD Evaluation Model are used to evaluate STP Walk Rally.

Adult Learning

Cross (1982) stated that people working in adult learning situations should apply four fundamental principles.

1. Present new information only if it is meaningful and practical.
2. Present only one idea or concept at a time--to help adults integrate it with their existing knowledge.
3. Present information in a manner that permits mastery. Adults maintain the ability to learn throughout their lifetime.
4. Use feedback and frequent summarization to facilitate and foster retention and recall.
5.

Applying Cross's first principle, throughout the course, information is presented at an appropriate time. Participants might not understand what is going on while experiencing the activities. Trainers help participants search for answers by themselves. However, the activities in STP Walk Rally are contrived and artificial. As none of the activities in STP Walk Rally occur in real life, the feedback received may not be very meaningful.

As to the second principle, in the debriefing sessions, the participants are asked to integrate what they have learned and how they can use their learning in the workplace. Contrary to the principle, many ideas are presented at a time in the debriefings. Participants might be confused by trainers' references.

For the third principle, experiential training encourages participants to learn at their own pace. Participants of different ages are able to take this course at the same time. However, competition in the STP Walk Rally is contrary to this principle as mastery allows everyone to succeed. Becker (1998) stated that the downside of using games in training is that games tend to spotlight inequalities among participants' verbal skills, physical coordination, or intellectual prowess. "They create winners and losers, and the losers remember it" (p. 79).

For the last principle, videotaping can be a great tool for giving feedback. It has recorded the actual reactions of the participants that might differ from their recollections of the activities. However, the feedback is not provided frequently. There are only two debriefings during the three-day training.

Experiential Learning

Kolb and Fry (1975) presented an experiential learning cycle. The cycle includes (a) concrete experience, (b) observation and reflections, (c) formalization of abstract concepts and generalizations, and (d) testing implications of concepts in new situations. This cycle is continuous because the last step, involving the application of learned concepts, leads to new concrete experiences and the beginning of another cycle.

STP Walk Rally uses the experiential learning cycle for designing the activities in Phase II. This cycle includes (a) having the experiences on the first-round walk; (b) observing and reflecting on the experiences through the videotape and comments by staff and participants; (c) debriefing or analyzing the experience by discussing thoughts and feelings about the relationship of the experience to real life; and (d) applying the results of the analyses to the second-round walk. The two-round walks, videotape reflection, and debriefing make the STP Walk Rally a complete variant of the experiential learning cycle. However, some companies ask for one-round of the walk only, which is contrary to the continuous cycle concept.

It is clear that experiential learning is a participatory approach to training in which learners do things rather than sit and listen to a lecture. Bruner (1996) stated that some things are learned best by actually doing them. Much research has been done comparing the effectiveness of experiential training with that of traditional classroom training. Lumlert (1994) conducted research on the efficiency of Walk Rally training in the Electricity Generating Authority of Thailand. According to her research, Walk Rally training improved trainees' decision making, self-control, and planning skills, while traditional classroom training improved only decision making. However, this research did not conduct pre-test assessment.

Hayward suggested that using a combination of outdoor courses with some classroom training works best (in Fryberger, 1995). Lee and Caffarella (1994) claimed that in-class activities can facilitate the synthesis between background knowledge and new knowledge to the extent that the activities encourage active reflection or problem solving, especially if they are highly interactive. STP Walk Rally has a combination of classroom training and outdoor activities.

Dewey (1929) argued that "it is wrong to see experience as the easy way to learn" (p. 6). However, in experiential learning learners experience real feelings and emotions (Clements, Wagner, & Roland, 1995). STP Walk Rally activities require trainees to commit themselves to team success. With no role-playing, there is no place to hide from one's feelings (Fryberger, 1995). Yet none of these activities occurs in the workplace.

Holton's HRD Measurement Model

Holton's (1996) measurement model is a contemporary evaluation model that has only three outcome measures: learning, individual performance, and organizational results. The first outcome, *learning*, is influenced by trainee reaction, motivation to learn, and ability.

1. *Trainee reaction* plays a critical role in STP Walk Rally. Adams (1997) cited much research about adult play from anthropology, psychology, and education that indicates that play is an important mediator for learning and socialization throughout life. "One way to actively engage learners is to use play in training and development programs" (p. 881). Many groups of participants prefer playing games to sitting for lectures.

Thai people want "sanuk" (play) through games and experiential activities instead of boring traditional classroom training. Komin's (1990) study in Thailand found that fun-pleasure values function as the imperative mechanism as a means to support and maintain more important interpersonal interaction values. Fun is a part of the STP Walk Rally program. However, fun cannot guarantee that participants will learn more. In addition, it is not easy to involve every trainee in playing every activity.

2. *Motivation to learn*, according to Holton (1996), has a direct relationship with learning. The four variables that influence the degree of motivation are readiness for the intervention, job attitudes, personal characteristics, and motivation to transfer learning. Motivation to transfer will be discussed in the performance outcomes section. One way to improve the intervention readiness for STP Walk Rally is to present the list of things that participants should prepare before attending the course. For example, the trainees should bring comfortable clothes and shoes and have a medical examination.

Job attitude and personal characteristics are independent variables that can affect training success. If the trainees have positive job attitudes, it is likely that they will be more motivated to learn and will have better training

outcomes. Personal characteristics, such as self-efficacy, locus of control, and need achievement, have been shown to influence motivation to learn. On the other hand, there is much research on OBET that has attempted to measure without much success these three characteristics as training outcomes (Kolb, 1993; Parker, 1992; Robitscheck, 1993; Taragos, 1993). Without a pre-test, no one can assume that these three characteristics are training outcomes.

3. *Ability* has a direct impact on learning. Holton (1996) noted that heterogeneity in groups' cognitive abilities tends to influence positively training outcomes. Recognition of this is built into the structure of the STP Walk Rally groups as well. The participants normally come from different departments in a company.

The second outcome, *individual performance*, is influenced by motivation to transfer, transfer climate, and transfer design. *Transfer motivation* falls into four categories: intervention fulfillment, learning outcomes, job attitudes, and expected utility. Expected utility will be discussed in the organizational results section.

Intervention fulfillment and job attitudes are independent factors that are beyond the control of training management, but they are considered to be influences on performance outcome. *Transfer climate* and *transfer design* are met by debriefing in STP Walk Rally which helps participants yo apply what they have learned in the workplace. However, in the Thai culture, debriefing, which includes criticizing participants in front of each other, is difficult for Thais. "Face-saving" and "kreng jai" or "ego preserving" are key criteria in relationships. As a result, straightforward negative performance feedback, strong criticism, and face-to-face confrontation techniques must be avoided (Komin, 1990). Becker (1998) presented two incidents in which people who lose face experience significant consequences, leading to decreased learning and withdrawal, antagonism, and sabotage.

The third outcome, influences on *organizational results*, is linked to organizational goals, expected utility or payoff, and external factors. STP Walk Rally has both strengths and weaknesses in this area.

1. Linkage to *organizational goals* can be done from the beginning. Front-end analysis must begin with organizational analysis to identify the highest priority opportunities for performance improvement (Swanson, 1994). STP Walk Rally provides both interviews and questionnaires for the client as a form of training needs assessment. However, the organizational analysis is not required for every company. Further, a comprehensive analysis might well lead to interventions other than STP Walk Rally.

2. *Expected utility or payoff measure* is recommended to determine whether or not the OBET program is a warranted investment of resources. Swanson and Gradous (1988) suggested that financial benefits should be forecasted before the intervention begins. The result of the STP Walk Rally could be measured in terms of financial benefits, but this has not been done. Reduction in absenteeism and employee turnover and improvement in productivity can be calculated as financial benefits. Also, the psychological benefit or quality of work life during and after training should be considered as a return of investment (ROI). Ewert (1989) agreed that the goal of OBET is not only to improve an individual's physical performance but also to enhance the person's cognitive, attitudinal, and behavioral skills to achieve lifelong physical and emotional well-being. Currently, organizations in Thailand consider encouraging employees to become "khon-kheng khon-dee," intellectual and moral persons (Kampu-Na-Ayuthaya, Na-Chiangmai, & Thongwiwat, 1993).

3. As *external factors* outside the realm of training can affect the organizational results, they need to be identified and controlled for in the design.

Recommendations for Practice

Designing experiential training is not an easy task. The following are some recommendations for future development of STP Walk Rally in Thailand.

- Because of kreng-jai (ego-preserving) and face-saving, participants may be more comfortable in giving feedback by writing a diary to reflect on their thoughts and feelings and by providing written feedback.
- STP Walk Rally seems to lack mechanisms for shaping the participants' future. Using scenarios is recommended. A scenario is "a tool for ordering one's perceptions about the future environments in which decisions might be played out" (Schwartz, 1996). Participants should have opportunities to think about how they can transfer what they learn to the workplace.
- The course should not be the same every time because each client company has different needs and culture. The program should be tailored for the individual client. Also, the activities should be altered to meet specific objectives. Organizational analysis is a must.
- The trainer should play a key role in developing both individuals and the organization. Rothwell et al. (1995) recommended that the trainer's role be broadened to include consulting with participant organizations to ensure organizational support for improved performance after training. Otherwise, the performance cannot be maintained for very long.

- Evaluation is needed for improvement of the program. To determine the impact of the participants' characteristics on experiential learning, pre- and post-test evaluation should be provided to measure the real training effect. To protect against post-test euphoria, the post-test should not be conducted right after the training. STP Walk Rally to date has used only post-test evaluation.
- At least two rounds of the STP Walk Rally should be run each time. Trainers should refuse to run one-day sessions.

Recommendations for Research

There is a paucity of research in Thailand in this field. Both qualitative and quantitative research studies are recommended. Miner (1993) found different results from qualitative and quantitative methods on team building through experience-based training. Nonparticipant observation and other qualitative methods suggested that training had a strong impact on participants and on the company. However, quantitative research found that the training did not result in significant differences. In contrast, Reina (1995) found that both quantitative and qualitative results partially supported the hypothesis that physical touch in the context of adventure training within work teams significantly and positively impacted trust. Thus, both research paradigms are necessary and useful.

An experimental research design is highly recommended to include both pre- and post-tests. Most research on OBET uses only a pre-test. Moreover, follow-up tests should be provided to confirm learning outcomes and to protect against post-test euphoria. Ibbetson (1995) provided evidence that a team development intervention had an immediate, short-term, positive effect on the group as a whole but had no long-term effect. Wagner and Roland (1992) noted that programs with long duration would allow a better comparison.

Conclusion

STP Walk Rally seems to have both strengths and weaknesses based on adult learning theory, experiential learning theory, and Holton's HRD evaluation and measurement model.

The STP Walk Rally's strengths are (a) activity design that encourages participants to learn at their own pace; (b) learning cycle that (usually) completes the experiential learning cycle; (c) a learning setting that combines an outdoor course with classroom training; and (d) fun during the training that creates a better learning environment. However, fun cannot guarantee that participants learn.

Weaknesses in the STP Walk Rally are (a) STP activities that do not occur in real life; (b) competition that creates winners and losers; (c) time consuming; and (d) debriefing that criticizes in front of others. In Thai culture, face-saving and "kreng jai" are common attributes that cannot be ignored during the debriefing.

Without needed research on STP Walk Rally, it is difficult to credit it with success. Before such an analysis takes place, the basic design of STP Walk Rally needs to be modified based upon this analysis so that it more closely matches what is already known through theory.l

References

Adams, R. B. (1997). Play theory for HRD: A conceptual literature review. In R. J. Torraco (Ed.), Academy of Human Resource Development 1997 conference proceedings (pp. 881-888). Baton Rouge, LA: Academy of Human Resource Development.

Baldwin, T., Wagner, R., & Roland, C. (1991). Effectiveness of outdoor challenge on group and individual outcomes. Unpublished manuscript, University of Wisconsin, Center for Research in Experiential Training, Whitewater, WI.

Becker, R. (1998). Taking the misery out of experiential training. Training, 35(2), 78-79.

Bruner, J. S. (1966). Toward a theory of instruction. Cambridge, MA: Harvard University Press.

Clements, C., Wagner, R. J., & Roland, C. C. (1995). The ins and outs of experiential training. Training and Development, 49(2), 52-56.

Cross, P. (1982). Adults as learners. San Francisco: Jossey-Bass.

Dewey, J. (1929). Experience and nature. LaSalle: The Open Court Publishing Company.

Ewert, A. W. (1989). Outdoor adventure pursuits: Foundations, models, and theories. Worthington, OH: Publishing Horizon.

Fryberger, S. J. (1995). Team building. Meetings & Conventions, 30(6), 118-120.

Holton, E. F., III. (1996). The flawed four-level evaluation model. Human Resource Development Quarterly, 7(1), 5-21.

Ibbetson, A. B. (1993). Team building: The relative effectiveness of an adventure-based experiential training approach. Unpublished master's thesis, University of Utah, UT.

Kampu-Na-Ayuthaya, T., Na-Chiang Mai, C., & Thongwiwat, J. (1993). The interest and understanding of administrators in public and private sectors toward HRD. Bangkok: Research Center, NIDA.

Kidd, J. R. (1973). How adults learn. New York: Association Press.

Kijyanyong, S. (1997). Walk rally: Games and activities for self and team development. Bangkok: Z-Education.

Kolb, D. A., & Fry, R. (1975). Toward an applied theory of experiential learning. In Cooper, C. (Ed.), Theories of group processes. New York: John Wiley.

Kolb, D. C. (1993). General self-efficacy and outdoor experiential training (Doctoral dissertation, Georgia State University). Dissertation Abstract International, 54, 0079.

Komin, S. (1990). Psychology of the Thai people: Values and behavioral patterns. Bangkok: Research Center, NIDA.

Lee, P., & Caffarella, R. S. (1994). Methods and techniques for engaging learners in experiential learning activities. New Directions for Adult and Continuing Education, 62, 43-54.

Lumlert, S. (1994) The efficiency of training: Walk rally in Electricity Generating Authority of Thailand (EGAT). Unpublished master's thesis, National Institute of Development Administration (NIDA), Bangkok, Thailand.

Mathes, G. E. (1968). Group dynamics for student activities. Washington DC: The National Association of Secondary School Principals.

Miner, T. A. (1993). A comparison of isomorphic and generic processing approaches for team building through experience-based training and development: A quantitative and qualitative analysis (Doctoral dissertation, Boston University, 1993). Dissertation Abstracts International, 54, 0017.

National Association for Girls & Women in Sport (NAGWS) (Sept 1976 - Sept 1978). NAGWS guide: Team handball, racquetball, orienteering. Washington DC: AAHPER Promotion Unit.

Parker, M. W. (1992). Impact of adventure interventions on traditional counseling interventions (ropes course) (Doctoral dissertation, University of Oklahoma, 1992). Dissertation Abstracts International, 53, 0169.

Reina, D. S. (1995). Developing trust in work teams: The impact of touch (nonverbal behavior) (Doctoral dissertation, The Fielding Institute, 1995). Dissertation Abstracts International, 56, 0565.

Robitscheck, C. C. (1993). Psychological and demographic predictors of success in an outward bound program (psychological predictors, life transitions) (Doctoral dissertation, University of Minnesota, 1993). Dissertation Abstracts International, 54, 0130

Rothwell, W. J., Sullivan, R., & McLean, G. N. (Eds.). (1995). Practicing organization development: A guide for consultants. San Diego: Pfeiffer & Company.

Schwartz, P. (1996). The art of the long view. New York: Currency-Doubleday.

Swanson, R. A. (1994). Analysis for improving performance: Tools for diagnosing organizations & documenting workplace expertise. San Francisco; Berrett-Koehler Publishers.

Swanson, R. A., & Gradous, D. B. (1988). Forecasting financial benefits of human resource development. San Francisco: Jossey-Bass.

Taragos, G. W. (1993). Effects of outdoor laboratory training and follow-up strategies on self-esteem and group climate among corporate employees (Doctoral dissertation, University of Minnesota, 1993). Dissertation Abstracts International, 54, 0130.

Wagner, R. J., Baldwin, T. T., & Roland, C. C. (1991). Outdoor training: Revolution or fad? Training and Development Journal, 12(2), 51-57.

Wagner, R. J., & Roland, C. C. (1992). How effective is outdoor training? Training and Development Journal, 46(7), 61-66.